



# Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

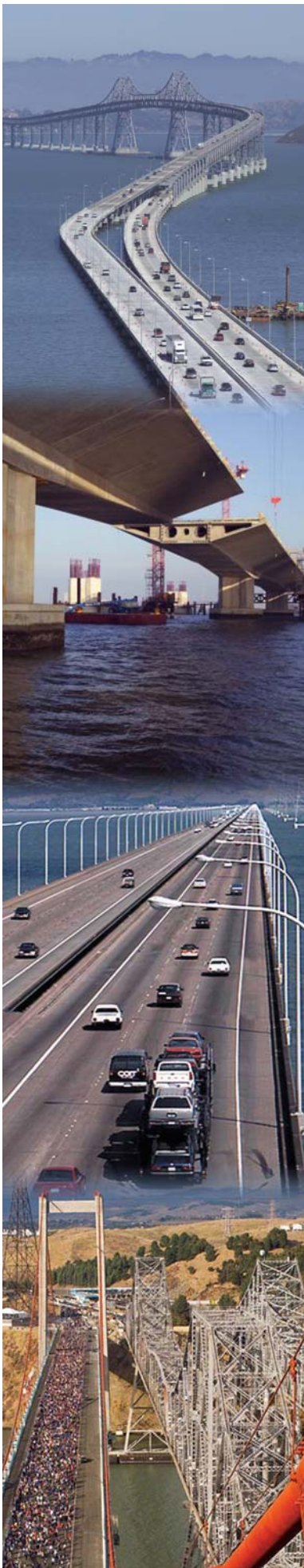
## Monthly Progress Report December 2005

Toll Bridge Program Oversight Committee



Released: January 2006





# Toll Bridge Seismic Retrofit and Regional Measure 1 Programs

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## Monthly Progress Report December 2005

### Toll Bridge Program Oversight Committee



California Department of Transportation



Bay Area Toll Authority



California Transportation Commission

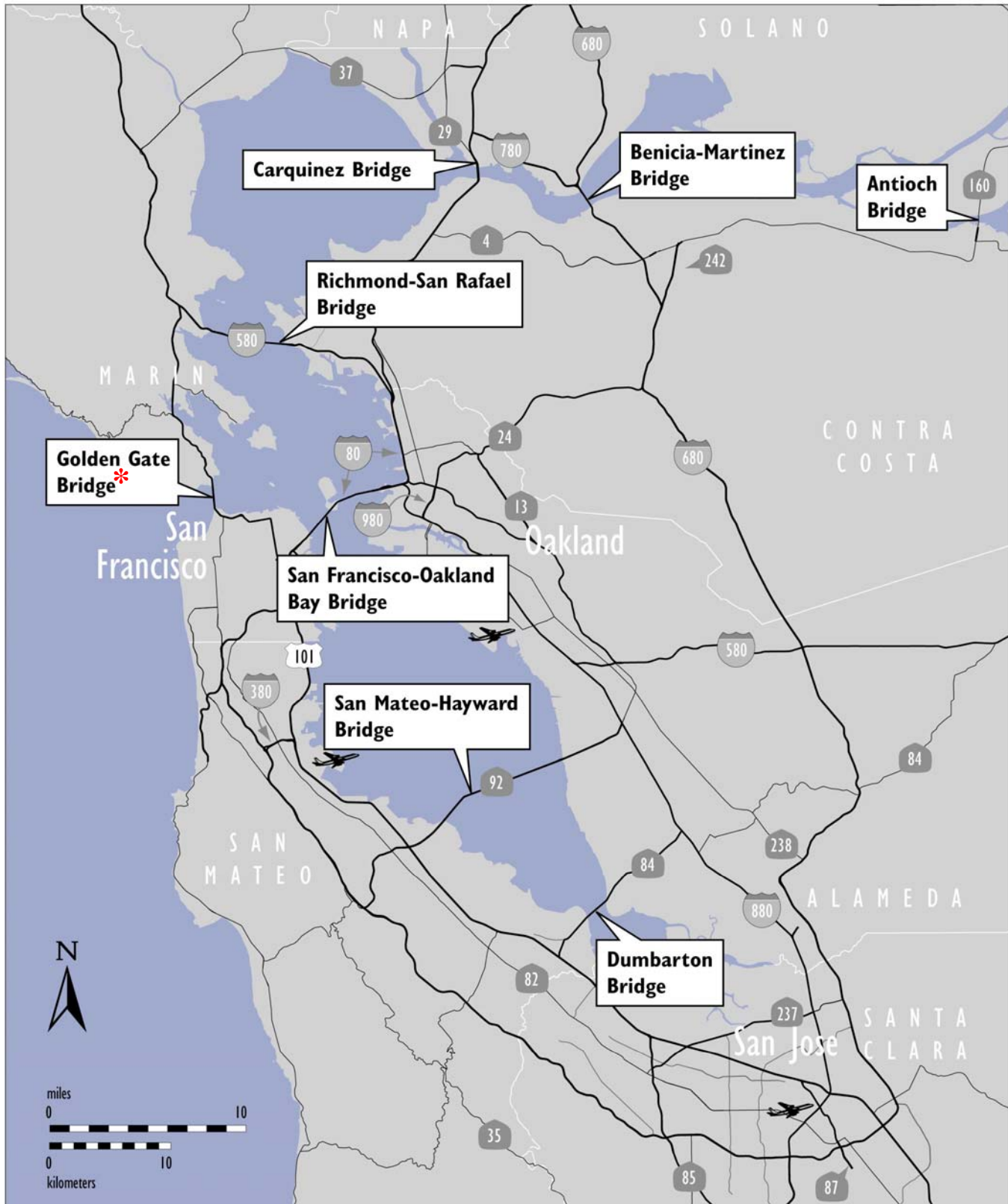


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## Toll Bridges of the San Francisco Bay Area



\* Under the Jurisdiction of the Golden Gate Bridge, Highway and Transportation District

## INTRODUCTION

In July 2005, Assembly Bill 144, Hancock (AB 144) created the Toll Bridge Project Oversight Committee (TBPOC) to implement a project oversight and project control process for the Benicia-Martinez Bridge project and the state toll bridge seismic retrofit program projects. Comprised of the Caltrans Director, the Bay Area Toll Authority (BATA) Executive Director and the Executive Director of the California Transportation Commission (CTC), the TBPOC's project oversight and control processes include but are not limited to reviewing bid specifications and documents, providing field staff to review ongoing costs, reviewing and approving significant change orders and claims in excess of \$1 million (as defined by the committee) and preparing project reports.

AB 144 identified the Toll Bridge Seismic Retrofit Program and the new Benicia-Martinez Bridge Project as under the direct oversight of the TBPOC. The Toll Bridge Seismic Retrofit Program includes:

| Toll Bridge Seismic Retrofit Projects                       | Seismic Safety Status |
|---|-----------------------|
| San Francisco-Oakland Bay Bridge East Span Replacement      | Construction          |
| San Francisco-Oakland Bay Bridge West Approach Replacement  | Construction          |
| San Francisco-Oakland Bay Bridge West Span Seismic Retrofit | Complete              |
| San Mateo-Hayward Bridge Seismic Retrofit                   | Complete              |
| Richmond-San Rafael Bridge Seismic Retrofit                 | Complete              |
| Eastbound Carquinez Bridge Seismic Retrofit                 | Complete              |
| Benicia-Martinez Bridge Seismic Retrofit                    | Complete              |
| San Diego-Coronado Bridge Seismic Retrofit                  | Complete              |
| Vincent Thomas Bridge Seismic Retrofit                      | Complete              |

The new Benicia-Martinez Bridge is part of a larger program of toll-funded projects, called the Regional Measure 1 (RM1) Toll Bridge Program, under the responsibility of the BATA. While the rest of the projects in the RM1 program are not directly under the responsibility of the TBPOC, BATA and Caltrans (CT) will continue to report on their progress as an informational item. The RM1 program includes:

| RM1 Projects   | Open to Traffic Status |
|--|------------------------|
| New Benicia-Martinez Bridge  | Construction           |
| 1927 Carquinez Bridge Demolition                                       | Construction           |
| Richmond-San Rafael Bridge Deck Overlay Rehabilitation                 | Design                 |
| Interstate 880/State Route 92 Interchange Reconstruction               | Design                 |
| Richmond-San Rafael Bridge Trestle, Fender & Deck Joint Rehabilitation | Open                   |
| Westbound Carquinez Bridge Replacement                                 | Open                   |
| San Mateo-Hayward Bridge Widening                                      | Open                   |
| State Route 84 Bayfront Expressway Widening                            | Open                   |
| Richmond Parkway   | Open                   |

This report focuses on identifying critical project issues and monitoring project cost and schedule performance for the projects as measured against approved budgets and schedule milestones. This report is intended to fulfill Caltrans' requirement to provide monthly project progress reporting to the TBPOC under Section 30952.05 of the Streets and Highway Code.

## EXECUTIVE SUMMARY

## Toll Bridge Seismic Retrofit Program—Cost (\$Millions)

| Project   | Work Status  | AB 144 / SB 66 Budget | Approved Changes | Current Budget | Actual Cost To Date (11/2005) | Estimate at Completion | At-Completion Variance | Cost Status |
|---|--------------|-----------------------|------------------|----------------|-------------------------------|------------------------|------------------------|-------------|
| a   | b            | c                     | d                | e = c + d      | f                             | g                      | h = g - e              | i           |
| <b>SFOBB East Span Replacement Project</b>        |              |                       |                  |                |                               |                        |                        |             |
| Capital Outlay Support                            |              | 959.4                 | -                | 959.4          | 393.6                         | 977.1                  | 17.7                   | ●           |
| Capital Outlay Construction                       |              |                       |                  |                |                               |                        |                        |             |
| Skyway  | Construction | 1,293.0               | -                | 1,293.0        | 946.0                         | 1,293.0                | -                      | ●           |
| SAS Superstructure                                | Advertise    | 1,753.7               | -                | 1,753.7        | -                             | 1,767.4                | 13.7                   | ●           |
| SAS E2/T1 Foundations                             | Construction | 313.5                 | -                | 313.5          | 65.6                          | 313.5                  | -                      | ●           |
| YBI Transition Structures                         | Design       | 299.3                 | -                | 299.3          | -                             | 318.4                  | 19.1                   | ●           |
| Oakland Touchdown                                 | Design       | 283.8                 | -                | 283.8          | -                             | 272.7                  | (11.1)                 | ●           |
| South/South Detour                                | Design/Const | 131.9                 | -                | 131.9          | 29.3                          | 133.8                  | 1.9                    | ●           |
| Existing Bridge Demolition                        | Design       | 239.2                 | -                | 239.2          | -                             | 222.0                  | (17.2)                 | ●           |
| Stormwater Treatment Measures                     | Design       | 15.0                  | -                | 15.0           | -                             | 15.0                   | -                      | ●           |
| East Span Completed Projects                      |              | 90.3                  | -                | 90.3           | 89.0                          | 90.3                   | -                      |             |
| Right-of-Way and Environmental Mitigation         |              | 72.4                  | -                | 72.4           | 38.7                          | 72.4                   | -                      | ●           |
| Other Budgeted Capital                            |              | 35.1                  | -                | 35.1           | -                             | 11.0                   | (24.1)                 |             |
| <b>Total SFOBB East Span Replacement Project</b>  |              | <b>5,486.6</b>        | <b>-</b>         | <b>5,486.6</b> | <b>1,562.2</b>                | <b>5,486.6</b>         | <b>-</b>               |             |
| <b>SFOBB West Approach Replacement</b>            |              |                       |                  |                |                               |                        |                        |             |
|   | Construction |                       |                  |                |                               |                        |                        | ●           |
| Capital Outlay Support                            |              | 120.0                 | -                | 120.0          | 70.1                          | 120.0                  | -                      |             |
| Capital Outlay Construction                       |              | 309.0                 | -                | 309.0          | 174.7                         | 309.0                  | -                      |             |
| <b>Total SFOBB West Approach Replacement</b>      |              | <b>429.0</b>          | <b>-</b>         | <b>429.0</b>   | <b>244.8</b>                  | <b>429.0</b>           | <b>-</b>               |             |
| <b>Richmond-San Rafael Bridge Retrofit</b>        |              |                       |                  |                |                               |                        |                        |             |
|   | Construction |                       |                  |                |                               |                        |                        | ●           |
| Capital Outlay Support                            |              | 134.0                 | -                | 134.0          | 122.3                         | 127.0                  | (7.0)                  |             |
| Capital Outlay Construction                       |              | 780.0                 | -                | 780.0          | 666.1                         | 698.0                  | (82.0)                 |             |
| <b>Total Richmond-San Rafael Bridge Retrofit</b>  |              | <b>914.0</b>          | <b>-</b>         | <b>914.0</b>   | <b>788.4</b>                  | <b>825.0</b>           | <b>(89.0)</b>          |             |
| <b>Program Completed Projects</b>                 |              |                       |                  |                |                               |                        |                        |             |
|   | Complete     |                       |                  |                |                               |                        |                        |             |
| Capital Outlay Support                            |              | 219.8                 | -                | 219.8          | 219.3                         | 219.8                  | -                      |             |
| Capital Outlay Construction                       |              | 705.6                 | -                | 705.6          | 698.0                         | 705.6                  | -                      |             |
| <b>Total Program Completed Projects</b>           |              | <b>925.4</b>          | <b>-</b>         | <b>925.4</b>   | <b>917.3</b>                  | <b>925.4</b>           | <b>-</b>               |             |
| <b>Miscellaneous Program Costs</b>                |              |                       |                  |                |                               |                        |                        |             |
|   |              | 30.0                  | -                | 30.0           | 25.1                          | 30.0                   | -                      |             |
| <b>Program Contingency</b>                        |              |                       |                  |                |                               |                        |                        |             |
|   |              | 900.0                 | -                | 900.0          | -                             | 989.0                  | 89.0                   |             |
| <b>Total Toll Bridge Seismic Retrofit Program</b> |              | <b>8,685.0</b>        | <b>-</b>         | <b>8,685.0</b> | <b>3,537.8</b>                | <b>8,685.0</b>         | <b>-</b>               |             |

- Within Approved Schedule and Budget
  - Potential Cost and Schedule Impacts: Possible future need for Program Contingency Allocation
  - Known Cost and Schedule Impacts: Request for Program Contingency Allocation forthcoming
- Note: Details may not sum to totals due to rounding effects.



## Toll Bridge Seismic Retrofit Program—Schedule

| Project                                    | Project Complete<br>AB 144 /<br>SB 66<br>Baseline | Project Complete<br>Forecast | Schedule<br>Variance<br>(Months) | Schedule<br>Status | Remarks   |
|--|---|------------------------------|----------------------------------|--------------------|---|
| a  | b   | c                            | d = c - b                        | e                  | f   |
| <b>SFOBB East Span Replacement Project</b> |   |                              |                                  |                    |   |
| Skyway                                     | Apr 07  | Apr 07                       | -                                | ●                  | Fabrication issues concerning the Skyway hinge pipe beams could impact project schedule and budget. See page 10.  |
| SAS E2/T1 Foundations                      | Jun 08  | Mar 08                       | (3)                              | ●                  | The suspension of work on this contract has been lifted. The TBPOC has approved the Contract Change Order (CCO) that restarts the work. See page 14.                                    |
| SAS Superstructure                         | Mar 12  | Sep 12                       | 6                                | ●                  | This contract is being re-advertised. Addendum #5 to the SAS Contract, issued by Caltrans on 12/21/05, extends the completion schedule for the SAS by 6 months. See pages 9, 12 and 13. |
| YBI Transition Structures                  | Nov 13  | Nov 13                       | -                                | ●                  | Schedule is being assessed.   |
| Oakland Touchdown (OTD)                    | Nov 13  | Nov 13                       | -                                | ●                  | Schedule is being assessed.   |
| • OTD Submarine Cable                      | n/a   | Jul 07                       | -                                | ●                  |   |
| • OTD Westbound                            | n/a   | Jul 09                       | -                                | ●                  |   |
| • OTD Eastbound                            | n/a   | Nov 13                       | -                                | ●                  | Schedule is being assessed.   |
| YBI South/South Detour                     | Jul 07  | Jul 07                       | -                                | ●                  | Schedule is being assessed.   |
| Existing Bridge Demolition                 | Sep 14  | Sep 14                       | -                                | ●                  | Schedule is being assessed.   |
| Stormwater Treatment Measures              | Mar 08  | Jul 08                       | 4                                | ●                  |   |
| Open to Traffic Date: West Bound           | Sep 11  | Mar 12                       | 6                                | ●                  |   |
| Open to Traffic Date: East Bound           | Sep 12  | Mar 13                       | 6                                | ●                  |   |
| <b>SFOBB West Approach Replacement</b>     | Aug 09  | Aug 09                       | -                                | ●                  |   |
| <b>Richmond-San Rafael Bridge Retrofit</b> | Aug 05  | Oct 05                       | 2                                | ●                  | Seismic retrofit completed July 29, 2005. Formal acceptance of this contract on October 28, 2005.   |

## Regional Measure 1 Program—Cost (\$Millions)

| Project   | Work Status  | July 2005 Budget | Approved Changes | Current Budget | Actual Cost To Date (11/2005) | Estimate at Completion | At-Completion Variance | Cost Status |
|---|--------------|------------------|------------------|----------------|-------------------------------|------------------------|------------------------|-------------|
| a   | b            | c                | d                | e = c + d      | f                             | g                      | h = g - e              | i           |
| <b>New Benicia-Martinez Bridge Project</b>                          | Construction |                  |                  |                |                               |                        |                        | ●           |
| Capital Outlay Support  |              | 157.1            | 21.1             | 178.2          | 140.4                         | 178.2                  | -                      |             |
| Capital Outlay Construction   |              | 861.6            | 143.1            | 1,004.7        | 721.5                         | 1,004.7                | -                      |             |
| Capital Outlay Right-of-Way   |              | 20.4             | (0.1)            | 20.3           | 12.0                          | 20.3                   | -                      |             |
| Project Reserve   |              | 20.8             | 39.0             | 59.8           | -                             | 59.8                   | -                      |             |
| <b>Total New Benicia-Martinez Bridge Project</b>                    |              | <b>1,059.9</b>   | <b>203.1</b>     | <b>1,263.0</b> | <b>873.9</b>                  | <b>1,263.0</b>         | <b>-</b>               |             |
| <b>Carquinez Bridge Replacement Project</b>                         | Construction |                  |                  |                |                               |                        |                        | ●           |
| Capital Outlay Support  |              | 124.4            | -                | 124.4          | 114.0                         | 125.4                  | 1.0                    |             |
| Capital Outlay Construction   |              | 381.2            | -                | 381.2          | 356.1                         | 383.3                  | 2.1                    |             |
| Capital Outlay Right-of-Way   |              | 10.5             | -                | 10.5           | 9.9                           | 10.5                   | -                      |             |
| Project Reserve   |              | 12.1             | -                | 12.1           | -                             | 9.0                    | (3.1)                  |             |
| <b>Total Carquinez Bridge Replacement Project</b>                   |              | <b>528.2</b>     | <b>-</b>         | <b>528.2</b>   | <b>480.0</b>                  | <b>528.2</b>           | <b>-</b>               |             |
| <b>Richmond-San Rafael Bridge Deck Overlay Rehabilitation</b>       | Design       |                  |                  |                |                               |                        |                        | ●           |
| Capital Outlay Support  |              | 8.0              | -                | 8.0            | 1.5                           | 8.0                    | -                      |             |
| Capital Outlay Construction   |              | 16.9             | -                | 16.9           | -                             | 20.7                   | 3.8                    |             |
| Project Reserve   |              | 0.1              | -                | 0.1            | -                             | -                      | (0.1)                  |             |
| <b>Total Richmond-San Rafael Bridge Deck Overlay Rehabilitation</b> |              | <b>25.0</b>      | <b>-</b>         | <b>25.0</b>    | <b>1.5</b>                    | <b>28.7</b>            | <b>3.7</b>             |             |
| <b>I-880/SR-92 Interchange Reconstruction</b>                       | Design       |                  |                  |                |                               |                        |                        | ●           |
| Capital Outlay Support  |              | 28.8             | -                | 28.8           | 25.8                          | 43.2                   | 14.4                   |             |
| Capital Outlay Construction   |              | 94.8             | -                | 94.8           | -                             | 119.0                  | 24.2                   |             |
| Capital Outlay Right-of-Way   |              | 9.9              | -                | 9.9            | 7.3                           | 13.0                   | 3.1                    |             |
| Project Reserve   |              | 0.3              | -                | 0.3            | -                             | 11.1                   | 10.8                   |             |
| <b>Total I-880/SR-92 Interchange Reconstruction</b>                 |              | <b>133.8</b>     | <b>-</b>         | <b>133.8</b>   | <b>33.1</b>                   | <b>186.3</b>           | <b>52.5</b>            |             |
| <b>Program Completed Projects</b>                                   | Complete     |                  |                  |                |                               |                        |                        |             |
| Capital Outlay Support  |              | 54.0             | -                | 54.0           | 53.8                          | 55.5                   | 1.5                    |             |
| Capital Outlay Construction   |              | 307.6            | -                | 307.6          | 289.5                         | 296.7                  | (10.9)                 |             |
| Capital Outlay Right-of-Way   |              | 1.5              | -                | 1.5            | 0.5                           | 0.6                    | (0.9)                  |             |
| Project Reserve   |              | 1.8              | -                | 1.8            | 0.2                           | 0.7                    | (1.1)                  |             |
| <b>Total Program Completed Projects</b>                             |              | <b>364.9</b>     | <b>-</b>         | <b>364.9</b>   | <b>344.0</b>                  | <b>353.5</b>           | <b>(11.4)</b>          |             |
| <b>Total Regional Measure 1 Program</b>                             |              | <b>2,111.8</b>   | <b>203.1</b>     | <b>2,314.9</b> | <b>1,732.5</b>                | <b>2,359.7</b>         | <b>44.8</b>            |             |

● Within Approved Schedule and Budget

● Potential Cost and Schedule Impacts

● Known Cost and Schedule Impacts

Note: Details may not sum to totals due to rounding effects.

## Regional Measure 1 Program—Schedule

| Project   | Project Complete Baseline | Project Complete Forecast | Schedule Variance (Months) | Schedule Status | Remarks  |
|---|---------------------------|---------------------------|----------------------------|-----------------|--|
| a   | b                         | c                         | d = c - b                  | e               | f  |
| <b>New Benicia-Martinez Bridge Project</b>                    |                           |                           |                            | ●               |  |
| • New Benicia-Martinez Bridge Open to Traffic Date            | Dec 07                    | Dec 07                    |                            | ●               | On 12/21/05, BATA approved a budget revision for the project to a total budget of \$1.263 billion. |
| • New Bridge Construction Complete                            | Dec 07                    | Feb 08                    | 2                          |                 |  |
| <b>1927 Carquinez Bridge Demolition Project</b>               | Dec 07                    | Sep 07                    | (3)                        | ●               |  |
| <b>Richmond-San Rafael Bridge Deck Overlay Rehabilitation</b> | Jan 07                    | Jan 07                    | -                          | ●               | Staff is reviewing the project estimate. See page 39.  |
| <b>I-880/SR-92 Interchange Reconstruction</b>                 | Nov 10                    | Dec 10                    | 1                          | ●               | Environmental clearance issues have impacted the cost/schedule for this project. See page 40.      |

## Highlight of Project/Program Activities and Changes for December 2005

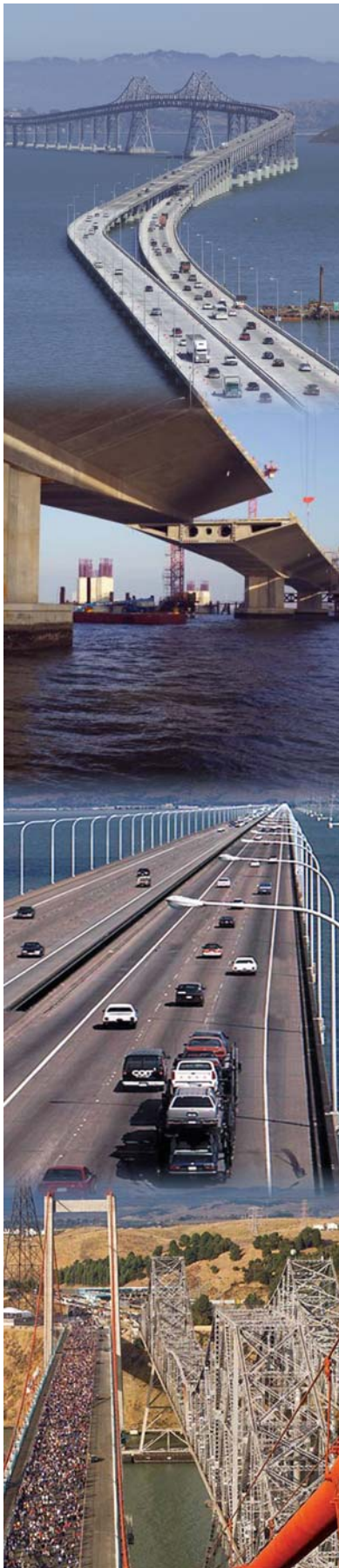
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### Toll Bridge Seismic Retrofit Program

- ◆ Addendum #5 to the SAS contract was issued by Caltrans on December 21, 2005. Addendum #5 extends the completion date of the SAS project by 6 months. Through the bidder inquiries for the contract, two of the major firms that will potentially submit bids for the project requested that the project completion schedule be extended. As a result of the addendum, the westbound opening of the new span is now scheduled for March 2012 with eastbound following a year later in March 2013. Based on TBPOC review, the inclusion of these 6 additional months is expected to attract more bidders, thereby increasing competition and lowering bid costs. The 6-month addition to the schedule restores the schedule duration to the initial SAS contract bid duration. Addendum #5 also included design and fabrication revisions to the cable saddles and bridge bearing systems, and revising payment terms on fabricated items. See pages 9, 12 and 13.
- ◆ The Notice of Potential Claim (NOPC #11) regarding the fabrication of the Hinge Pipe Beam for East Span Skyway contract was heard by the Dispute Review Board (DRB) in late November and early December 2005. The DRB is expected to provide an opinion on the issue in January 2006. See page 11.
- ◆ In November 2005, the TPBOC approved CCO #29 concerning the restart of the E2/T1 contract. This CCO added \$81 million in cost and reduced the contract schedule by 3 months. See page 14.
- ◆ On December 23, 2005, the TBPOC approved Addendum #6 to the SAS bid documents, which is anticipated to be the last addendum to be released for the project, prior to the bid opening scheduled for February 1, 2006. Addendum #6 includes a number of technical specification changes, including removal of requirements for additional wooden mock-ups, changes due to construction conflicts as identified by on-going integrated shop drawing review, and lessons learned from the test seismic deck joint on the Carquinez Bridge.
- ◆ In December 2005, Caltrans was requested by potential bidders to further extend the bid period by several months. The TBPOC discussed the request on December 29, 2005 and decided not to make further delay the contract by making additional contract and schedule changes beyond those already approved in Addendum #5 and #6. The bid opening date remains February 1, 2006.

### Regional Measure 1 Program

- ◆ On December 21, 2005, BATA approved an increase to the budget for the Benicia-Martinez New Span project from \$1.060 billion to \$1.263 billion. The revised budget reflects the resolution of the heat of hydration issues for the main span portion of the project and provides contingency funds based on the identified risk management issues for the project. See pages 30 and 34.
- ◆ In December 2005, demolition of the deck of the 1927 span of the Carquinez Bridge began. Removal of major sections of the bridge structures are slated to begin in January, 2006. See page 36.



## PROJECT / CONTRACT REPORTS

### Toll Bridge Seismic Retrofit Program

#### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

- Skyway Contract
- Self-Anchored Suspension (SAS) Superstructure Contract
- Self-Anchored Suspension (SAS) E2/T1 Foundation Contract
- Yerba Buena Island (YBI) South/South Detour Contract
- Other Major Contracts in Design
- Other Contracts and Related Project Work

#### San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

#### Richmond-San Rafael Bridge Seismic Retrofit Project

#### Other Completed Seismic Retrofit Projects



## Toll Bridge Seismic Retrofit Program

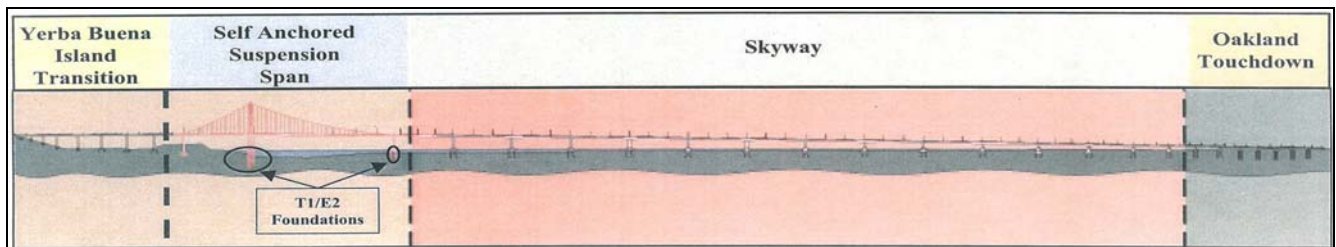
### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Summary

**Project Description:** The East Span will be seismically retrofitted through the complete replacement of the existing span. The remaining effort for this project consists of the following contracts: Skyway—construction of two parallel concrete structures, each approximately 1.3 miles in length; Self-Anchored Suspension (SAS) Foundation—construction of SAS marine foundations; SAS Superstructure—construction of a self-anchored 385-meter main span superstructure incorporating a 160-meter fabricated structural steel tower with a main cable and inclined suspenders that will support steel orthotropic decks; Yerba Buena Island (YBI) South/South Detour—design and construction of a temporary double-deck bypass structure that will detour traffic to the existing SFOBB while completing the westerly permanent tie-in structure of the new East Span at Yerba Buena Island; YBI Structures—construction of a new structure connecting the western end of the self-anchored suspension to the Yerba Buena Island viaduct, which will be retrofitted; Oakland Touchdown—at the Oakland end of the East Span, construction of two parallel, cast-in-place post-tensioned concrete viaducts, which join the skyway to the at-grade Oakland approach fill; and Existing Bridge Demolition—demolition of the existing 1936 SFOBB East Span structure after the construction and placement of traffic onto the new East Span.

#### SFOBB East Span Replacement Cost Summary (\$Millions)

| Contract                                  | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at *<br>Completion | Variance  |
|---|-----------------------------|---------------------|-------------------|---------------------------|-----------------------------|-----------|
| a   | b                           | c                   | d = b + c         | e                         | f                           | g = f - d |
| Capital Outlay Support                    | 959.4                       | -                   | 959.4             | 393.6                     | 977.1                       | 17.7      |
| Capital Outlay Construction               | -                           | -                   | -                 | -                         | -                           | -         |
| Skyway                                    | 1,293.0                     | -                   | 1,293.0           | 946.0                     | 1,293.0                     | -         |
| SAS Superstructure                        | 1,753.7                     | -                   | 1,753.7           | -                         | 1,767.4                     | 13.7      |
| SAS E2/T1 Foundations                     | 313.5                       | -                   | 313.5             | 65.6                      | 313.5                       | -         |
| YBI Structures                            | 299.3                       | -                   | 299.3             | -                         | 318.4                       | 19.1      |
| Oakland Touchdown                         | 283.8                       | -                   | 283.8             | -                         | 272.7                       | (11.1)    |
| YBI South/South Detour                    | 131.9                       | -                   | 131.9             | 29.3                      | 133.8                       | 1.9       |
| Existing Bridge Demolition                | 239.2                       | -                   | 239.2             | -                         | 222.0                       | (17.2)    |
| Stormwater Treatment Measures             | 15.0                        | -                   | 15.0              | -                         | 15.0                        | -         |
| East Span Completed Projects              | 90.3                        | -                   | 90.3              | 89.0                      | 90.3                        | -         |
| Right-of-Way and Environmental Mitigation | 72.4                        | -                   | 72.4              | 38.7                      | 72.4                        | -         |
| Other Budgeted Capital                    | 35.1                        | -                   | 35.1              | -                         | 11.0                        | (24.1)    |
| <b>TOTAL</b>                              | <b>5,486.6</b>              | <b>-</b>            | <b>5,486.6</b>    | <b>1,562.2</b>            | <b>5,486.6</b>              | <b>-</b>  |

Note: Details may not sum to totals due to rounding effects.



SFOBB East Span Replacement Project

**SFOBB East Span Replacement Schedule Summary**

| Contract                      | Baseline Project Completion Date | Forecast Project Completion Date | Variance (Months) |
|-------------------------------|----------------------------------|----------------------------------|-------------------|
| Skyway                        | April 2007                       | April 2007                       | -                 |
| YBI South / South Detour*     | July 2007                        | July 2007                        | -                 |
| Stormwater Treatment Measures | March 2008                       | July 2008                        | 4                 |
| SAS E2/T1 Foundations         | June 2008                        | March 2008                       | (3)               |
| Open to Traffic: West Bound   | September 2011                   | March 2012                       | 6                 |
| SAS Superstructure            | March 2012                       | September 2012                   | 6                 |
| Open to Traffic: East Bound   | September 2012                   | March 2013                       | 6                 |
| Oakland Touchdown*            | November 2013                    | November 2013                    | -                 |
| YBI Transition Structure*     | November 2013                    | November 2013                    | -                 |
| Existing Bridge Demolition*   | September 2014                   | September 2014                   | -                 |

\* Contract schedules being assessed due to changes in SAS schedule.

**Project Status:** Construction is currently ongoing on the Skyway and the YBI South/South Detour contracts. The SAS E2/T1 Foundation contract has been restarted, and the SAS Superstructure contract has been re-advertised. Caltrans issued Addendum #5 to the SAS contract in December 2005. This addendum extends the construction schedule for the contract by 6 months. The extension of the contract was in response to requests from potential bidders. See the following contract detail pages for more information. As part of an ongoing cost review process, Caltrans is reporting changes to the Estimate at Completion amounts for the project. Currently, these charges can be funded from contingencies in Other Budgeted Capital.

Note that the 14 month difference between the East Bound opening to traffic and the completion of the Oakland Touchdown contract is due to the need to complete various surrounding work at the Oakland Touchdown, including removal of the at-grade East Bound detour, the construction of a new maintenance road, removal of the temporary maintenance road detour, bike path and parking lot construction, and landscaping.

**Project Issues:** The results of the preliminary SAS and E2-T1 contract quantitative schedule risk analysis indicate that there is approximately an eighty percent probability that the SAS contract date of completion may be extended (whether by contractor, third party, weather, owner, or other excusable delay) by up to 21 months from the AB 144 / SB 66 schedule. It should be noted that this preliminary probabilistic schedule analysis does not consider many of the schedule risk responses subsequently identified and implemented, such as implementation of the fabrication action and solution team (FAST), and ongoing SAS contract addenda enhancements. Moreover, about half of the contract extension potential relates to the submission and review of tower shop drawings, and the fabrication and delivery of the lower tower sections. Contentious issues regarding quality and code interpretations may arise during review of shop drawings. There is considerable welding involved in the fabrication of the tower sections, giving rise to possible issues due to tight tolerances and different interpretations of welding codes and welding sequences. While these delay potentials exist now, there are risk responses such as FAST, the campus concept for integrating supplier/fabricator/Caltrans teams, and a review of the COS resources that can mitigate many of the delay-causing possibilities. As these responses will be implemented, their effectiveness in reducing the delay risks will be reassessed, and the schedule delay risk will be adjusted accordingly. Caltrans and TBPOC are and will be taking affirmative actions to mitigate any potential issues that may lead to schedule delays as described in the risk management plan.

The Federal Highway Administration (FHWA) has been conducting an assessment of the costs of the East Span which has included a focus on risk issues and associated cost impacts.

**Recent TBPOC Actions:** In October 2005, the TBPOC approved Addendum #3 and in November, Addendum #4 to the SAS bid documents, as well as the contract change order that restarts work on the SAS E2/T1 Foundation contract. In December 2005, The TBPOC approved Addendum #5 for the SAS contract. See the following contract detail pages for more information.

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► SKYWAY CONTRACT

**Contract Description:** The Skyway contract constructs two parallel pre-cast concrete approach spans from Oakland to the self-anchored suspension span near Yerba Buena Island.

#### Skyway Cost Summary (\$Millions)

| Contract                    | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|-----------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a                           | b                           | c                   | d = b + c         | e                         | f                         | g = f - d |
| East Span - Skyway          |                             |                     |                   |                           |                           |           |
| Capital Outlay Support      | 197.0                       | -                   | 197.0             | 117.6                     | 197.0                     | -         |
| Capital Outlay Construction | 1,293.0                     | -                   | 1,293.0           | 946.0                     | 1,293.0                   | -         |
| <b>TOTAL</b>                | <b>1,490.0</b>              | <b>-</b>            | <b>1,490.0</b>    | <b>1,063.6</b>            | <b>1,490.0</b>            | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

#### Skyway Schedule Summary

| Contract           | Baseline Contract<br>Completion Date | Forecast Contract<br>Completion Date | Variance (Months) |
|--------------------|--------------------------------------|--------------------------------------|-------------------|
| East Span - Skyway | April 2007                           | April 2007                           | -                 |

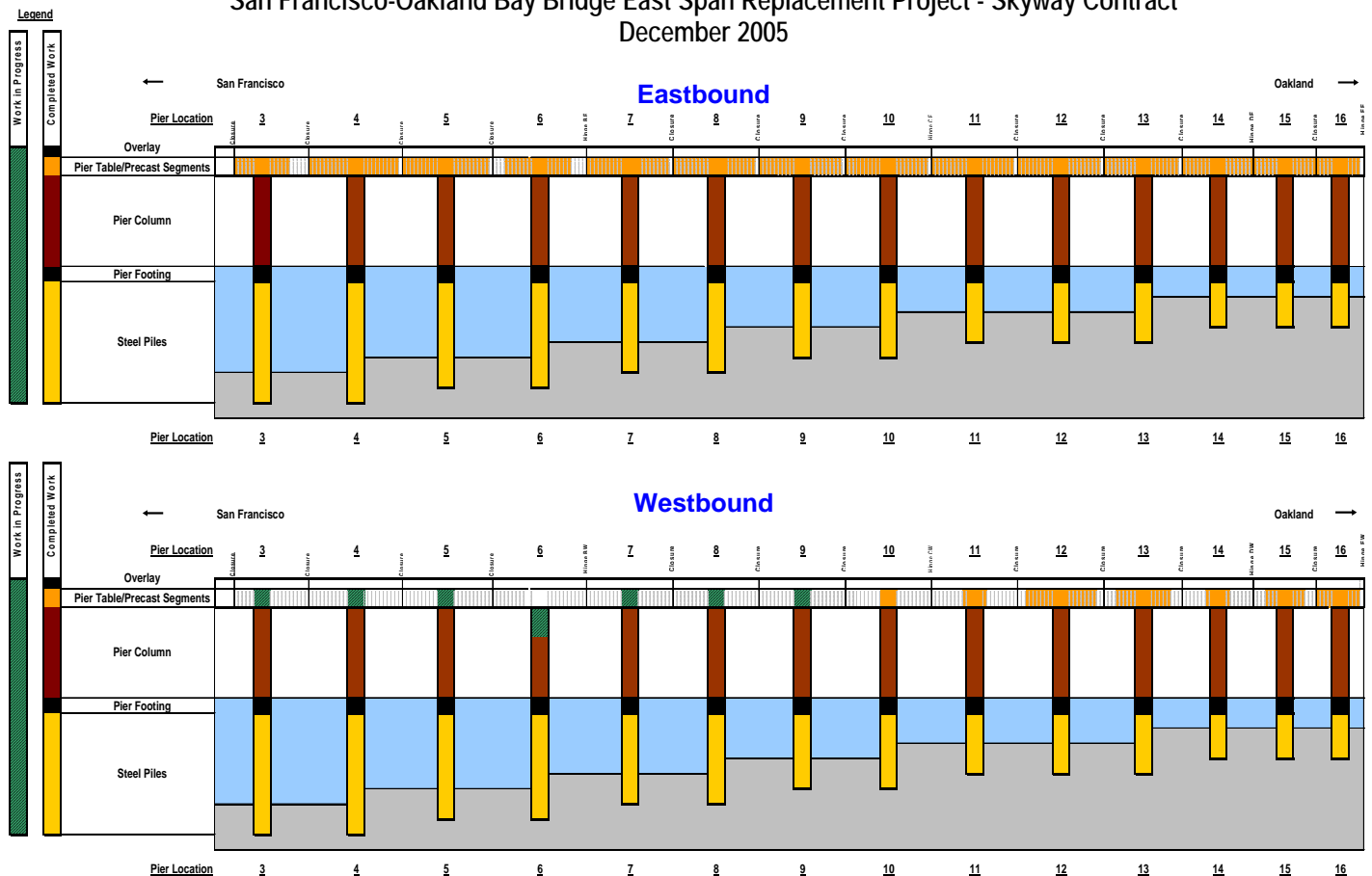
**Contract Status:** The Skyway contract is currently in construction and is 83% complete as of November 20, 2005. The Foundation work is complete with the exception of installing Fenders around six of the pier footings. The Fender work is currently scheduled to begin in January 2006 and be completed by September 2006. The last remaining pier column to be constructed is scheduled for completion in mid January 2006. The Pier Tables are 75% complete with six Pier Tables in various stages of construction and the last Pier Table to be started at Pier E6W, scheduled for completion by June 2006. Segment erection is currently 59% complete. The Eastbound structure is 96% complete with only 10 segments remaining to be completed, while the Westbound structure is 23% complete with 174 segments remaining to be completed. Erection activities are currently at Pier E11W and Pier E12W. Delivery of Hinge "BE" Pipe Beams are scheduled for January 2006. The eastbound Orthotropic Box Girder is scheduled to ship in early January 2006 from USI in Portland Oregon. Bike Path cantilever beams continue to be installed with 67% complete, while the installation of the panel segments are starting. The Stockton pre-cast yard continues to maintain their steady pace of casting one concrete bridge segment every two to three days in each of the two casting beds or roughly 5 segments per week. Currently, 394 of 452 segments or 87% have been cast with the remaining 58 segments scheduled to be complete by June 2006. A total of 256 segments have been installed to date.

**Contract Issues:**

| Issue   | Mitigating Action  |
|---|--|
| A schedule delay is currently projected by the contractor due to issues with the fabrication of the hinge pipe beams that connect the major frames of the bridge. | While Caltrans is evaluating the contractor's fabrication methodology for the pipe beams, the contractor is currently mitigating the schedule delays by resequencing segment erection activities. The projected delay to the Skyway project is not expected to delay the overall open-to-traffic date for the East Span Replacement project. |
| KFM issued 11 NOPC's on behalf of USI for welding issues related to the fabrication of the Steel Orthotropic Box Girders (SOBG).                                  | NOPC #11, regarding the Hinge Pipe Beam issues was heard by the Dispute Resolution Board (DRB) in November and December with two, two-day hearings. The Board's decision is expected in January 2006.  |
|   | USI continues fabrication of the SOBG with continued inspection by the Department. All NOPC's filed were recommended to be heard by the DRB, with the first three issues scheduled for March 2006.   |

**Recent TBPOC Actions:** None.

### San Francisco-Oakland Bay Bridge East Span Replacement Project - Skyway Contract December 2005



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► SELF-ANCHORED SUSPENSION (SAS) SUPERSTRUCTURE CONTRACT

**Contract Description:** The Self-Anchored Suspension (SAS) Superstructure contract constructs a signature tower span between the skyway and the Yerba Buena Island transition structure. Work on the SAS bridge has been split between three contracts—the SAS Superstructure (in advertisement), the SAS E2/T1 Foundation (under construction), and the SAS W2 Foundation (completed).

#### SAS Superstructure Cost Summary (\$Millions)

| Contract                       | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance    |
|--------------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-------------|
| a                              | b                           | c                   | d = b + c         | e                         | f                         | g = f - d   |
| East Span - SAS Superstructure |                             |                     |                   |                           |                           |             |
| Capital Outlay Support         | 214.6                       | -                   | 214.6             | 15.5                      | 214.6                     | -           |
| Capital Outlay Construction    | 1,753.7                     | -                   | 1,753.7           | -                         | 1,767.4                   | 13.7        |
| <b>TOTAL</b>                   | <b>1,968.3</b>              | <b>-</b>            | <b>1,968.3</b>    | <b>15.5</b>               | <b>1,982.0</b>            | <b>13.7</b> |

*Note: Details may not sum to totals due to rounding effects.*

#### SAS Superstructure Schedule Summary

| Contract                       | Baseline Contract<br>Completion Date | Forecast Contract<br>Completion Date | Variance (Months) |
|--------------------------------|--------------------------------------|--------------------------------------|-------------------|
| East Span - SAS Superstructure | March 2012                           | September 2012                       | 6                 |

**Contract Status:** The SAS Superstructure Contract was re-advertised on August 1, 2005. Bid opening is scheduled for February 1, 2006. Two outreach sessions were held during August, 2005. A contractor/Fabricator/Supplier meeting was held on September 23, 2005. A final outreach meeting for potential bidders was held on November 30, 2005. Caltrans is currently evaluating and responding to contractor inquiries (243 as of 12/15/05, 198 have been responded to) and preparing addenda to the contract plans and specifications as necessary. Key technical issues being addressed are the following:

- ◆ Caltrans has identified some areas for clarifications to the contract specifications to improve the method of work for the project.
- ◆ Caltrans is currently performing analyses to determine potential specification revisions to be included in addenda.
- ◆ Caltrans has deleted the first Contract Interim Milestone (Completion of the W2 cap beam) and has extended the contract time for completing the various Contract Milestones including overall Contract Completion by 6 months.

The estimate-at-completion forecast for the project was increased by \$13.7 million to cover actions taken to encourage additional bidders for the project, including the increase to the bidder's stipend to \$3 million for the lowest three responsive bidders, and to accelerate delivery of the project, including accelerating working drawing and progress schedule submittals. Currently, these charges can be funded from contingencies in Other Budgeted Capital.



**Contract Issues:**

| Issue  | Mitigating Action  |
|--|--|
| Caltrans' Risk Management evaluation of the project identified the potential lack of bidder competition as the greatest risk to maintaining project cost and schedule. | To increase number of bidders, the TBPOC has approved actions to de-federalize the SAS contract, revise the Cost Reduction Incentive Program (CRIP) to be more financially advantageous to contractors, increase the bidder's stipend to \$3 million to the lowest three responsive bidders, and hold additional contractor outreach sessions. |

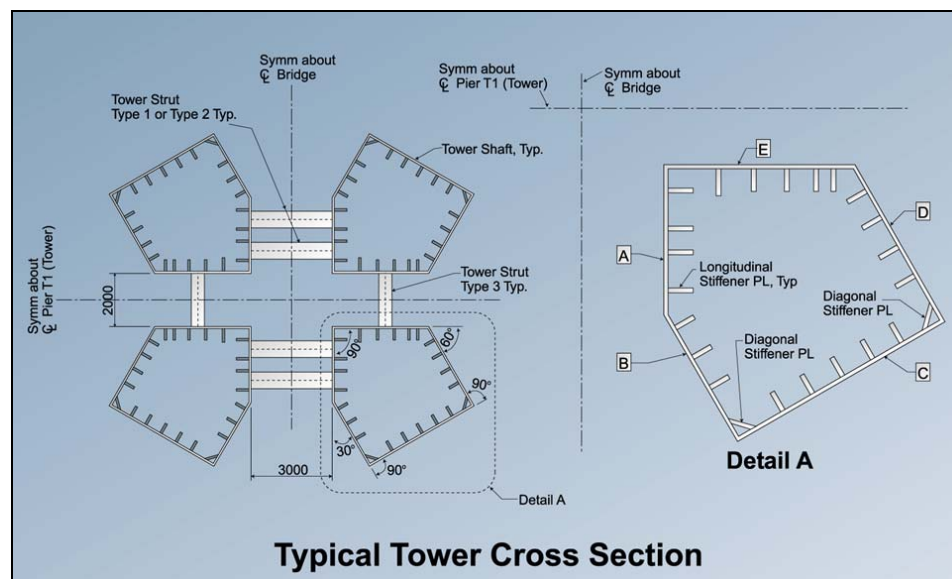
**Recent TBPOC Actions:** In November 2005, the TBPOC approved Addendum #4, which is comprised of a number of technical specification changes, including revisions based on bidder inquiries. In December 2005, the TBPOC approved Addendum #5 for the SAS Contract, which extended the completion schedule for the project by 6 months and provided for contractor access from the Oakland Mole via Westbound OTD and Skyway. Addendum #5 was issued by Caltrans on December 21, 2005. Also, in December 2005, the TBPOC approved Addendum #6 which consisted of various specification changes.

**Contract Photographs**

SAS Superstructure Artist Rendition



Western end of the Skyway contract that will connect with the future SAS contract



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► SELF-ANCHORED SUSPENSION (SAS) E2/T1 FOUNDATIONS CONTRACT

**Contract Description:** The Self-Anchored Suspension (SAS) E2/T1 Foundation contract constructs the main tower foundation at T1 and the adjacent east foundation at E2.

#### SAS E2/T1 Foundation Cost Summary (\$ Millions)

| Contract                            | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion * | Variance  |
|-------------------------------------|-----------------------------|---------------------|-------------------|---------------------------|-----------------------------|-----------|
| a                                   | b                           | c                   | d = b + c         | e                         | f                           | g = f - d |
| East Span - SAS E2 / T1 Foundations |                             |                     |                   |                           |                             |           |
| Capital Outlay Support              | 52.5                        | -                   | 52.5              | 7.5                       | 52.5                        | -         |
| Capital Outlay Construction         | 313.5                       | -                   | 313.5             | 65.6                      | 313.5                       | -         |
| <b>TOTAL</b>                        | <b>366.0</b>                | <b>-</b>            | <b>366.0</b>      | <b>73.1</b>               | <b>366.0</b>                | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

#### SAS E2/T1 Foundation Schedule Summary

| Contract                            | Baseline Contract<br>Completion Date | Forecast Contract<br>Completion Date | Variance<br>(Months) |
|-------------------------------------|--------------------------------------|--------------------------------------|----------------------|
| East Span - SAS E2 / T1 Foundations | June 2008                            | March 2008                           | (3)                  |

**Contract Status:** Work on the project was suspended in January 2005. Approximately 29% of the work on the project was completed prior to the suspension of work. Most of the completed work was the fabrication of steel piles. The original contract cost for the project was \$177 million. On July 29, 2005, Caltrans notified the contractor to restart the work on the project. The proposal for the revised schedule was received from the contractor on September 23, 2005. The contractor has signed a change order involving contract changes and compensation for the suspension and re-start of work. Contractor has set the steel template for the piling for the T1 foundation and is continuing with field preparations for the restart work.

#### Contract Issues:

| Issue   | Mitigating Action  |
|---|--|
| E2/T1 Foundations contract must be completed by March 2008 to avoid impact to the SAS Superstructure Contract.                                    | Caltrans and the Contractor have executed a restart change order to complete work by March 2008.   |
| Gaining firm commitment dates for cost-effective steel delivery from suppliers as part of E2/T1 Foundations restart is critical to resuming work. | Caltrans is focused on staying current with issues concerning the restart of the steel supply, to include replacing suppliers if required. |

**Recent TBPOC Actions:** In November 2005, the TBPOC approved CCO #29 concerning the restart of work on this contract. This executed CCO added \$81 million in cost (within the contract budget) and reduced the contract schedule by 3 months.

## Project Photographs



T1 = Foundation for the 530-foot steel tower  
 E2 = Eastern Support of the suspension roadway  
 W2 = Western Support of the suspension roadway



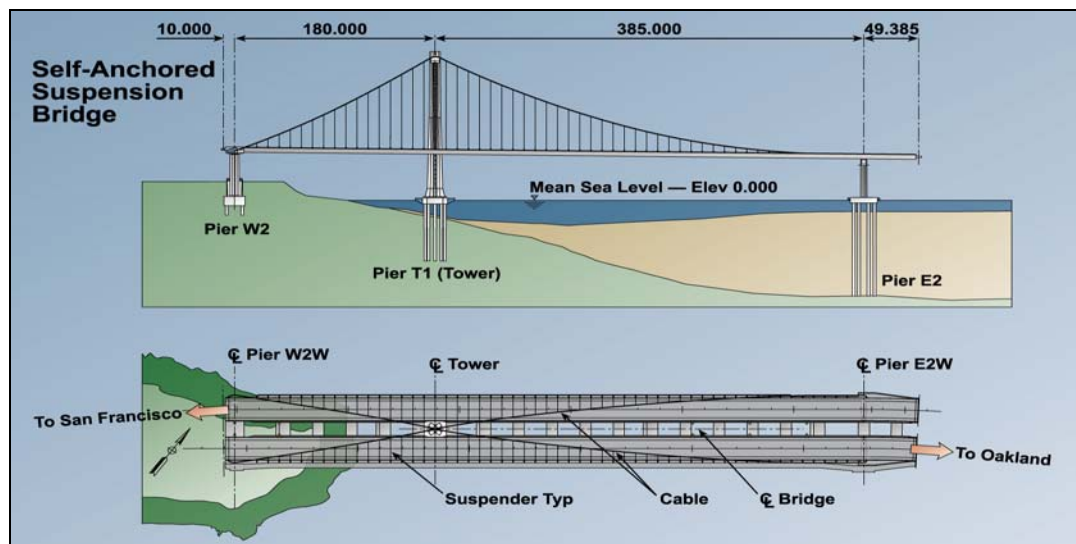
View of the completed W2 pier columns at the Yerba Buena Island, which will be the western support of the Self-Anchored Suspension (SAS) structure



T1 Template as seen from Yerba Buena Island.



T1 Template as seen from Pier 1 Treasure Island.



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► YERBA BUENA ISLAND (YBI) SOUTH/SOUTH DETOUR CONTRACT

**Contract Description:** The Yerba Buena Island (YBI) South/South Detour Contract constructs a temporary detour from the YBI tunnel to the existing east span of the Bay Bridge. This detour maintains traffic on the existing bridge while the YBI Transition Structure Contract completes the tie-in from the SAS to the existing tunnel.

#### YBI South/South Detour Cost Summary (\$Millions)

| Contract                    | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|-----------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a                           | b                           | c                   | d = b + c         | e                         | f                         | g = f - d |
| YBI South/South Detour      |                             |                     |                   |                           |                           |           |
| Capital Outlay Support      | 29.5                        | -                   | 29.5              | 13.5                      | 29.5                      | -         |
| Capital Outlay Construction | 131.9                       | -                   | 131.9             | 29.3                      | 131.9                     | -         |
| <b>TOTAL</b>                | <b>161.4</b>                | <b>-</b>            | <b>161.4</b>      | <b>42.8</b>               | <b>161.4</b>              | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

#### YBI South/South Detour Schedule Summary

| Contract                 | Baseline Contract<br>Completion Date | Forecast Contract<br>Completion Date | Variance (Months) |
|--------------------------|--------------------------------------|--------------------------------------|-------------------|
| YBI South / South Detour | July 2007                            | July 2007                            | -                 |

**Contract Status:** The contract is 34% complete as of November 20, 2005. To minimize impacts on the traveling public, portions of the East and West Tie-in operations remain suspended. The contract is performance based, whereby the contractor is responsible for both designing and constructing the detour structures. The contractor has formed and poured columns at Bents 48 and 49. Construction of the other bents is also in progress. The contractor's engineer continues to perform design work on the east and west tie-in structures for the detour.

Caltrans is forecasting a \$1.9 million increase in cost for the South/South Detour contract due to an extension of the contract to integrate with the schedule of the re-advertised SAS contract. See Contract Issues below. The impact of this change can be absorbed by available contract contingency.

#### Contract Issues:

| Issue   | Mitigating Action   |
|---|---|
| Delay to the SAS contract due to re-advertising has extended the South/South Detour Contract, so as to integrate with the schedule of the SAS contract. | The recently executed CCO #24 included a contract time extension to July 1, 2007 in order to align the schedule for this contract with the schedule requirements on the SAS contract. If the SAS completion is extended six months, there will be further changes to the South-South Detour contract including additional time extensions or scope changes. Caltrans will be evaluating impact and different options for this Contract to mitigate impact of the impending SAS schedule change. |

**Recent TBPOC Actions:** In December 2005 the TBPOC approved CCO #24 which provided a time extension to the contract along with compensation for time related overhead made necessary by changes to the SAS contract schedule. Total cost for this CCO is \$7 million. Total time added to the schedule is 381 days. Note that the Baseline Contract Completion Date shown above already accounts for the impact of this CCO.



**Contract Photographs**

*Temporary Bypass Structure (in yellow)*



*Footing and Pier Columns for Bent 48*



*Pier Column Construction for Bents 50 and 51*



## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► OTHER MAJOR CONTRACTS IN DESIGN

**Contract Description:** Caltrans is currently designing a number of other major construction contracts that will be necessary prior to opening the new east span, including the Oakland Touchdown and the YBI Transition Structure. Following opening of the new bridge, the existing bridge will be removed with the Bridge Demolition contract.

#### Other Major Contracts Cost Summary (\$Millions)

| Contract                          | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance   |
|-----------------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|------------|
| a                                 | b                           | c                   | d = b + c         | e                         | f                         | g = f - d  |
| Capital Outlay Support            | 238.8                       | -                   | 238.8             | 30.6                      | 256.5                     | 17.7       |
| Capital Outlay Construction       |                             |                     |                   |                           |                           | -          |
| YBI Transition Structure          | 299.3                       | -                   | 299.3             | -                         | 318.4                     | 19.1       |
| Oakland Touchdown                 | 283.8                       | -                   | 283.8             | -                         | 272.7                     | (11.1)     |
| Existing Bridge Demolition        | 239.2                       | -                   | 239.2             | -                         | 222.0                     | (17.2)     |
| Stormwater Treatment Measures     | 15.0                        | -                   | 15.0              | -                         | 15.0                      | -          |
| Total Capital Outlay Construction | 837.3                       | -                   | 837.3             | -                         | 828.1                     | (9.2)      |
| <b>TOTAL</b>                      | <b>1,076.1</b>              | <b>-</b>            | <b>1,076.1</b>    | <b>30.6</b>               | <b>1,084.6</b>            | <b>8.5</b> |

*Note: Details may not sum to totals due to rounding effects.*

#### Other Major Contracts Schedule Summary

| Project                       | Baseline Project<br>Completion Date | Forecast Project<br>Completion Date | Variance (Months) | Design %<br>Complete |
|-------------------------------|-------------------------------------|-------------------------------------|-------------------|----------------------|
| Stormwater Treatment Measures | March 2008                          | July 2008                           | 4                 | 100                  |
| YBI Transition Structure      | November 2013                       | November 2013                       | -                 | 80                   |
| Oakland Touchdown             | November 2013                       | November 2013                       | -                 | TBD                  |
| Existing Bridge Demolition    | September 2014                      | September 2014                      | -                 | 10                   |

#### Contract Status:

**Stormwater Treatment Measures:** This contract to implement best practices for stormwater runoff treatment will be advertised in early 2006. BATA approved the bid documents for this project for advertisement on October 26, 2005.

**Oakland Touchdown:** The TBPOC authorized Caltrans to split the Oakland Touchdown project into multiple contracts to accelerate work and to reduce the risk of any of this work impacting the critical path for the project. The first contract would construct all the marine foundation work and west-bound approach work earlier to keep the work off the project's critical path and is forecast to be complete in July 2009. The second contract would construct the remaining east-bound approach when west-bound traffic is shifted onto the new SAS and is forecast to be complete in May 2014. The third contract would replace the existing submarine electrical cable from Oakland to Treasure Island and it is forecast to be completed in August 2008. It will be the first to be

constructed to avoid possible construction conflicts. The fourth contract would incorporate most of the electrical elements from OTD as well as from other segments of the East Span into a single contract and is currently being scoped. Due to the split, the capital outlay forecast for this work has been reduced from \$283.8 million to \$272.7 million, saving \$11.1 million. However, the capital outlay support for the contract was increased to cover the additional work to split the contract and to administer four separate contracts over a longer duration rather than the original single contract. This COS impact is estimated at \$17.7 million, and includes engineering, support and administration costs. Currently, these charges can be funded from contingencies in Other Budgeted Capital. Caltrans recently issued for review 95% Plans, Specifications, Engineer's Estimate (PSE) documents for the Relocation of the Existing Submarine Cable. The contract schedule is under assessment given SAS contract schedule changes.

**YBI Transition Structure:** This contract is currently being designed by Caltrans. Caltrans has also initiated a value analysis effort on the project to evaluate the current design. Recent changes in the SAS contract, including the elimination of the completion milestone for the W2 cap beam and the potential 6-month extension to overall SAS completion, would affect the packaging and phasing options for the YBI Transition Structure contract. The contract schedule is under assessment given these SAS schedule changes and also due to YBI value engineering recommendations. As part of an ongoing cost review process, Caltrans is reporting a \$19.1 million increase in the Estimate at Completion amounts for the contract. Most of the cost increase is due to a higher estimate for electrical work and scheduling. Currently, these charges can be funded from contingencies in Other Budgeted Capital.

**Bridge Demolition:** Design is 10% complete and currently on hold. Caltrans recent budget estimates reduce the budget for the demolition work by \$17.2 million due to a re-evaluation of the cost escalation rates. The contract schedule is under assessment given SAS contract schedule changes.

**Recent TBPOC Actions:** In September 2005, the TBPOC authorized Caltrans to split the Oakland Touchdown project into multiple contracts for advertisement.

### Contract Photographs



*Artist's Rendition of Oakland touchdown Aerial View*

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project

#### ► OTHER COMPLETED CONTRACTS AND RELATED WORK

**Summary Description:** Substantial work has already been performed on the SFOBB East Span Replacement project to facilitate construction of the mainline construction contracts.

#### Other Contracts and Related Work Cost Summary (\$Millions)

| Contract                                    | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|---|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a   | b                           | c                   | d = b + c         | e                         | f                         | g = f - d |
| Capital Outlay Support                      | 227.0                       | -                   | 227.0             | 208.9                     | 227.0                     | -         |
| Right-of-Way and Environmental Mitigation   | 72.4                        | -                   | 72.4              | 38.7                      | 72.4                      | -         |
| Capital Outlay Construction                 |                             |                     |                   |                           |                           | -         |
| SAS W2 Foundations                          | 26.4                        | -                   | 26.4              | 25.7                      | 26.4                      | -         |
| YBI/SAS Archeology                          | 1.1                         | -                   | 1.1               | 1.1                       | 1.1                       | -         |
| YBI - USCG Road Relocation                  | 3.0                         | -                   | 3.0               | 2.8                       | 3.0                       | -         |
| YBI - Substation and Viaduct                | 11.6                        | -                   | 11.6              | 11.2                      | 11.6                      | -         |
| Oakland Geofill                             | 8.2                         | -                   | 8.2               | 8.2                       | 8.2                       | -         |
| Pile Installation Demonstration Project     | 9.2                         | -                   | 9.2               | 9.2                       | 9.2                       | -         |
| Existing East Span Retrofit                 | 30.8                        | -                   | 30.8              | 30.8                      | 30.8                      | -         |
| Total Capital Outlay Construction Completed | 90.3                        | -                   | 90.3              | 89.0                      | 90.3                      | -         |
| <b>TOTAL</b>                                | <b>389.7</b>                | <b>-</b>            | <b>389.7</b>      | <b>336.6</b>              | <b>389.7</b>              | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

#### Other Contracts and Related Work Schedule Summary

| Project                              | Actual Project Completion Date |
|--------------------------------------|--------------------------------|
| Existing East Span Retrofit          | March 1998*                    |
| Interim Retrofit                     | July 2000                      |
| Pile Installation Demolition Project | December 2000                  |
| YBI / SAS Archaeology                | January 2003                   |
| Oakland Geofill                      | April 2003                     |
| YBI – USCG Road Relocation           | June 2004                      |
| SAS W2 Foundations                   | October 2004                   |
| YBI Substation and Viaduct           | May 2005                       |

*\*The completion date of the Existing East Span Retrofit was changed from October 1997 to March 1998 to match the overall project completion date. While the interim seismic retrofit work was completed on October 1997, remaining contract work was not completed until March 1998.*

**Summary Status:** Construction has been completed on the above listed contracts. Caltrans continues to work with various environmental agencies to conduct compliance inspections and monitor and mitigate any environmental impacts from the project.

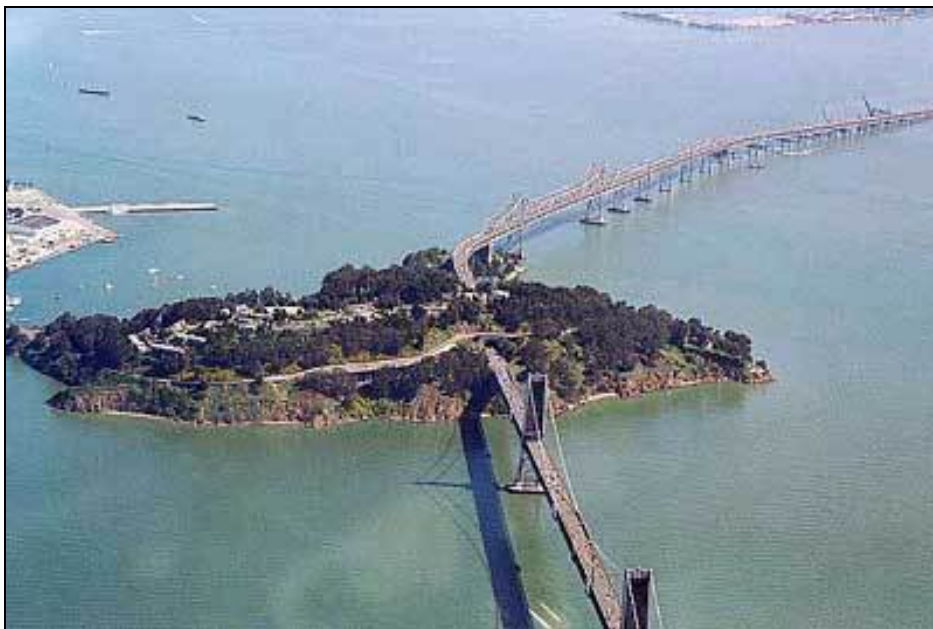
**Contract Issues:** None.

**Recent TBPOC Actions:** None.

#### Project Photographs



*San Francisco-Oakland Bay Bridge Night View*



*San Francisco-Oakland Bay Bridge Aerial View*

## Toll Bridge Seismic Retrofit Program

### San Francisco-Oakland Bay Bridge (SFOBB) West Approach Replacement Project

**Project Description:** The SFOBB West Approach Replacement Project will replace the entire west approach structure from the 5<sup>th</sup> Street to the west anchorage of the existing west spans of the SFOBB while maintaining existing traffic lanes for the weekday commute.

#### SFOBB West Approach Replacement Cost Summary (\$Millions)

| Contract                    | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|-----------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a                           | b                           | c                   | d = b + c         | e                         | f                         | g = f - d |
| West Approach               |                             |                     |                   |                           |                           |           |
| Capital Outlay Support      | 120.0                       | -                   | 120.0             | 70.1                      | 120.0                     | -         |
| Capital Outlay Construction | 309.0                       | -                   | 309.0             | 174.7                     | 309.0                     | -         |
| <b>TOTAL</b>                | <b>429.0</b>                | <b>-</b>            | <b>429.0</b>      | <b>244.8</b>              | <b>429.0</b>              | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

#### SFOBB West Approach Replacement Schedule Summary

| Project       | Baseline Project<br>Completion Date | Forecast Project<br>Completion Date | Variance (Months) |
|---------------|-------------------------------------|-------------------------------------|-------------------|
| West Approach | August 2009                         | August 2009                         | -                 |

**Project Status:** Construction work is 61% complete as of November 20, 2005, which includes mobilization. Seismic retrofitting construction is continuing throughout the project. Major work during the period include CIDH and CISS pile driving operations for the mainline, 5th Street and Harrison off ramps. Falsework for Frame 7U(N), and the preparation and steel work prior to the early Spring 2006 demolition of Frame 8U(N) continued. The 4th Street retrofit work also continued on Bents 6, 102 and 104. Stage 2 Frames 1U and 2U for the SFOBB Line Westbound structure also started.

#### Project Issues

| Issue  | Mitigating Action   |
|--|---|
| Largely due to the execution of CCO's related to project issues at Frame 7U(N), Caltrans is finalizing a supplemental funds request to augment the contract contingencies in the amount of approximately \$15 million. | No mitigating action is required as funds are available in the AB 144 / SB 66 project budget allotment. |

**Recent TBPOC Actions:** In October 2005, the TBPOC approved CCO #95 related to work at Frame 7U(N). This CCO added \$9.4 million in cost (within the overall project budget), and added 59 days to the schedule. Note that time allowances for risks that have been included in the West Approach schedule have absorbed the effect of this CCO, therefore, there are no changes to the forecast project completion date.



## Project Photographs



4 Sections Frames 7U - 8U



4 Sections Frames 7U - 8U



Interim Eastbound I-80



West Approach Frame 1U and 2U

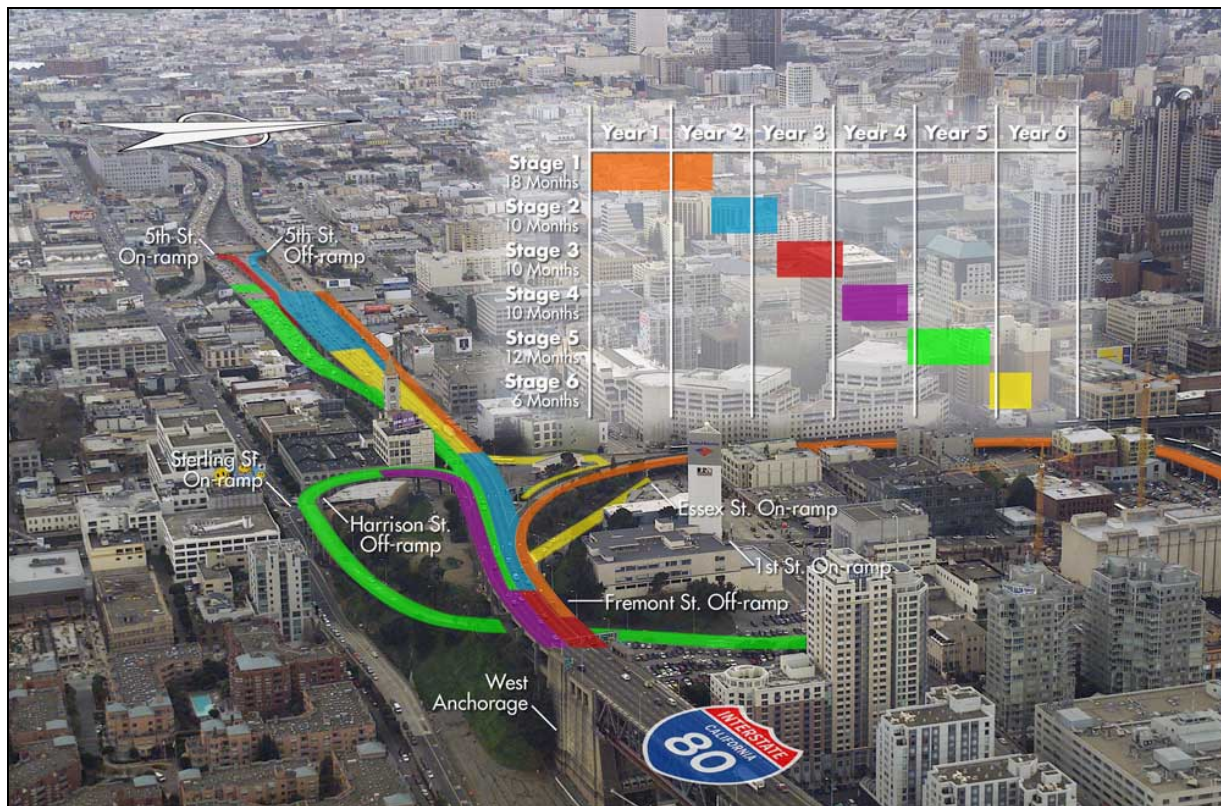


New Frame 7U north False work at bents 20 and 21

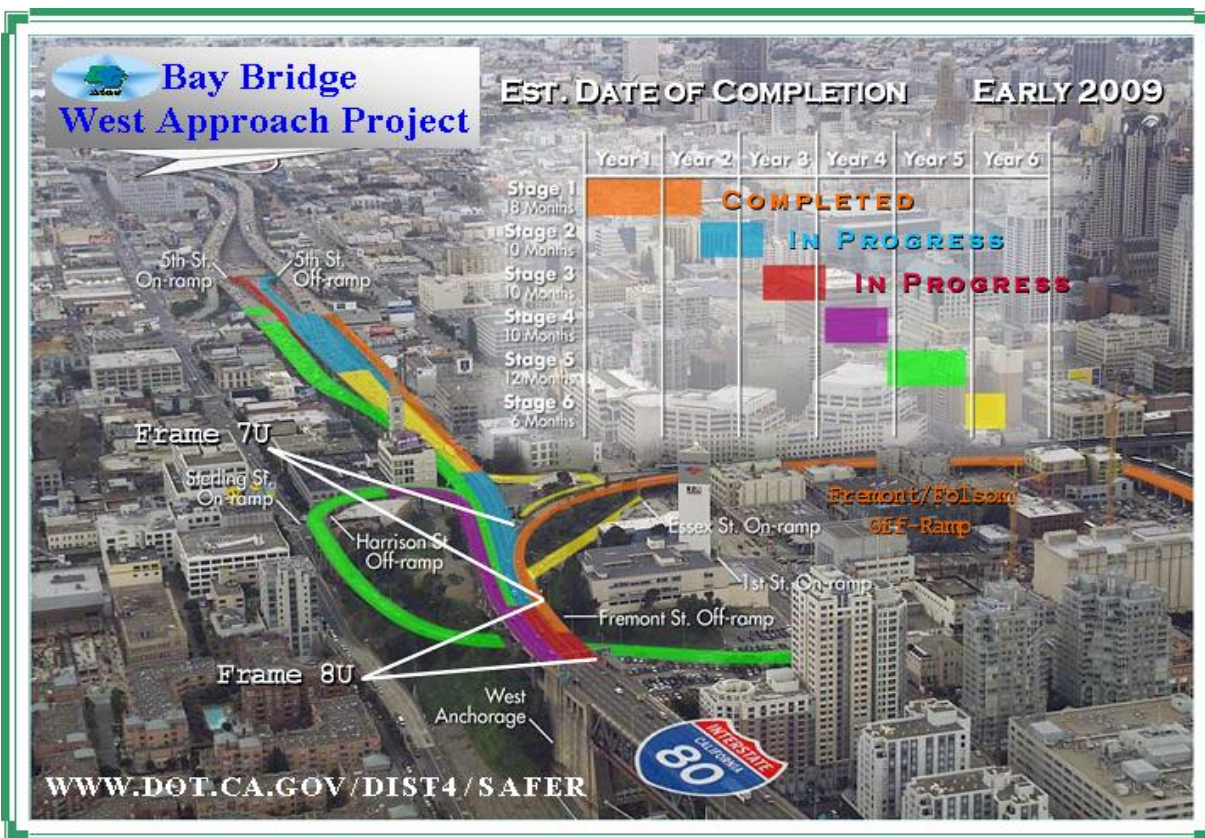


New 5th Street off ramp Bents 1 thru 5, CISS Piles





West Approach Project Stages



West Approach Project Stages

## Toll Bridge Seismic Retrofit Program

### Richmond-San Rafael Bridge (RSRB) Seismic Retrofit Project

**Project Description:** The Richmond-San Rafael (RSR) Bridge Seismic Retrofit Project strengthened the existing bridge to withstand the effects of a large seismic event. As part of the retrofit work, Caltrans performed work to strengthen the bridge foundations, replace the existing west trestle, the main channel fenders, and the joint rehabilitation of the bridge deck. (The RM1 work is reported in the RM1 section of the report).

#### RSRB Seismic Retrofit Cost Summary (\$Millions)

| Contract                    | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance      |
|-----------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|---------------|
| a                           | b                           | c                   | d = b + c         | e                         | f                         | g = f - d     |
| RSRB Seismic Retrofit       |                             |                     |                   |                           |                           |               |
| Capital Outlay Support      | 134.0                       | -                   | 134.0             | 122.3                     | 127.0                     | (7.0)         |
| Capital Outlay Construction | 780.0                       | -                   | 780.0             | 666.1                     | 698.0                     | (82.0)        |
| <b>TOTAL</b>                | <b>914.0</b>                | <b>-</b>            | <b>914.0</b>      | <b>788.4</b>              | <b>825.0</b>              | <b>(89.0)</b> |

*Note: Details may not sum to totals due to rounding effects.*

*\* The seismic retrofit contract included work to rehabilitate the bridge deck joints. Although the deck joint work was funded from RM1 toll funds, the work is also eligible for Toll Bridge Seismic Retrofit Program funding. In July 2005, BATA rescinded \$16.9 million in RM1 funds for the deck joint work to make additional RM1 funds available for the New Benicia-Martinez Bridge Project. An equivalent amount of seismic funds will be used on the deck joint work, which is included in the budget above. This issue is also discussed in the RM1 portion of the report on page 38.*

#### RSRB Seismic Retrofit Schedule Summary

| Project               | Baseline Project<br>Completion Date | Forecast Project<br>Completion Date | Variance (Months) |
|-----------------------|-------------------------------------|-------------------------------------|-------------------|
| RSRB Seismic Retrofit | August 2005                         | October 2005                        | 2                 |

**Project Status:** Caltrans achieved seismic safety on the bridge in July 2005. Caltrans is expecting at least \$89 million in savings from the AB 144 / SB 66 budget. The construction contract was completed and accepted on October 28, 2005. A Proposed Final Estimate has been submitted to the contractor, who has a deadline of January 6, 2006 to respond.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.

## Toll Bridge Seismic Retrofit Program

### Other Completed Seismic Retrofit Projects

**Summary Description:** Caltrans has already completed the seismic retrofits of the West Spans of the SFOBB, the existing 1958 Carquinez Bridge, the existing Benicia-Martinez Bridge, the San Mateo-Hayward Bridge, and two former toll bridges in southern California.

#### Other Completed Seismic Retrofit Projects Cost Summary (\$Millions)

| Project  | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|--|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a  | b                           | c                   | d = b + c         | e                         | f                         | g = f - d |
| San Francisco-Oakland Bay Bridge<br>West Span Seismic Retrofit Project | 307.9                       | -                   | 307.9             | 300.9                     | 307.9                     | -         |
| Carquinez Bridge Retrofit Project                                      | 114.2                       | -                   | 114.2             | 114.2                     | 114.2                     | -         |
| Benicia-Martinez Bridge Retrofit<br>Project                            | 177.8                       | -                   | 177.8             | 177.8                     | 177.8                     | -         |
| San Mateo-Hayward Bridge Retrofit<br>Project                           | 163.5                       | -                   | 163.5             | 163.4                     | 163.5                     | -         |
| Vincent Thomas Bridge Retrofit<br>Project                              | 58.5                        | -                   | 58.5              | 58.4                      | 58.5                      | -         |
| San Diego-Coronado Bridge Retrofit<br>Project                          | 103.5                       | -                   | 103.5             | 102.6                     | 103.5                     | -         |
| <b>TOTAL</b>   | <b>925.4</b>                | <b>-</b>            | <b>925.4</b>      | <b>917.3</b>              | <b>925.4</b>              | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects. Capital Outlay Support and Capital Outlay have been combined.*

#### Other Completed Seismic Retrofit Projects Schedule Summary

| Project                            | Actual Project Completion<br>Date |
|------------------------------------|-----------------------------------|
| Vincent Thomas Bridge Retrofit     | May 2000                          |
| San Mateo-Hayward Bridge Retrofit  | June 2000                         |
| Carquinez Bridge Retrofit          | January 2002                      |
| San Diego-Coronado Bridge Retrofit | June 2002                         |
| Benicia-Martinez Bridge Retrofit   | August 2002                       |
| SFOBB West Span Seismic Retrofit   | June 2004                         |

**Summary Status:** Construction has been completed on the above listed projects. The Estimate at Completion amounts shown above include allowances for minor project closeout costs.

**Contract Issues:** None.

**Recent TBPOC Actions:** None.



## Toll Bridge Seismic Retrofit Program

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### Other Toll Bridges

Caltrans has completed its seismic vulnerability studies work for the Antioch and Dumbarton toll bridges.

A Seismic Vulnerability Study is not a complete seismic analysis of the structure, but is an investigation of a few representative bents to determine the likelihood of the need for seismic retrofit. Given the limitations of the vulnerability studies, there is insufficient evidence to conclusively determine the performance of the bridges during a Maximum Credible Event (MCE). A comprehensive seismic analysis based on complete and accurate geotechnical soil data must be performed in order to make a final determination of the level of retrofit required.

#### Background:

**Antioch Bridge.** Located 25 miles upstream from the Benicia-Martinez Bridge, the Antioch Bridge on State Route 160 is the only northerly highway connection across the San Joaquin River linking east Contra Costa County to the delta communities of Rio Vista and Lodi. In 1978, a high-level fixed-span structure 1.6 miles long and 40 feet wide with a narrow shoulder in each direction for bicyclists, pedestrians and emergency use replaced the original bridge constructed in 1926. The Antioch Bridge spans the 3,600-foot wide San Joaquin River and extends 4,000 feet onto Sherman Island in Sacramento County to the north and 1,000 feet in Contra Costa County to the south. The Antioch Bridge has a navigational clearance of 135 feet vertically and 400 feet horizontally. Traffic lanes consist of two 12-foot wide lanes for motor vehicles and two 8-foot lanes for pedestrians and bicyclists.

**Dumbarton Bridge.** In 1978, construction began on the existing Dumbarton Bridge on State Route 84, which was opened to traffic in 1982 at a cost of \$70 million. The Dumbarton Bridge crosses the southern region of San Francisco Bay between the cities of Newark to the east and East Palo Alto to the west, connecting San Mateo and Alameda Counties. It is situated approximately 10 miles south of the San Mateo-Hayward Bridge and 27 miles south of the San Francisco-Oakland Bay Bridge.

The Dumbarton Bridge is a six-lane reinforced concrete structure that is 1.6 miles long with a pedestrian/bicycle lane. The center span, which has a length of 340 feet, provides 85 feet of vertical clearance for the passage of ships.

#### Need for Study

In 1971, a major earthquake occurred in the San Fernando Valley near Los Angeles and severely damaged several bridges in the area. Following the 1971 Southern California earthquake, Caltrans revised its seismic design practice in order to fully incorporate the experience gained from this event. Past reviews of historic bridge performance during subsequent large California earthquakes indicate bridges designed after 1971 have performed very well and significantly better than pre-1971 bridge designs.

The original designs of the Antioch and Dumbarton Bridges were based on design criteria developed after the 1971 San Fernando Earthquake. In the early 1990's, Caltrans determined that these two structures had the seismic resistant features required by the post 1971 codes and were not likely to be vulnerable during a major seismic event. Since that time, Caltrans has pursued an aggressive seismic research program, and based on the results of this program, again significantly revised its seismic practice. Consistent with recommendations by the Caltrans Seismic Advisory Board, Caltrans regularly reassesses the seismic hazard and performance of its bridges. Due to the tremendous changes in seismic design practices that have occurred since the design of the

Antioch and Dumbarton Bridges, a comprehensive assessment of the potential need and scope for seismic retrofit based on current knowledge is prudent.

### Seismic Vulnerability Study

The results of the Seismic Vulnerability Studies indicate that the foundation response governs the performance of the bridges during a Maximum Creditable Event (MCE) and this could result in large foundation rotations. These rotations may result in damage to the superstructure and possible damage to the piles.

A cost estimate, schedule, and risk management plan for a comprehensive seismic analysis is being determined at this time.

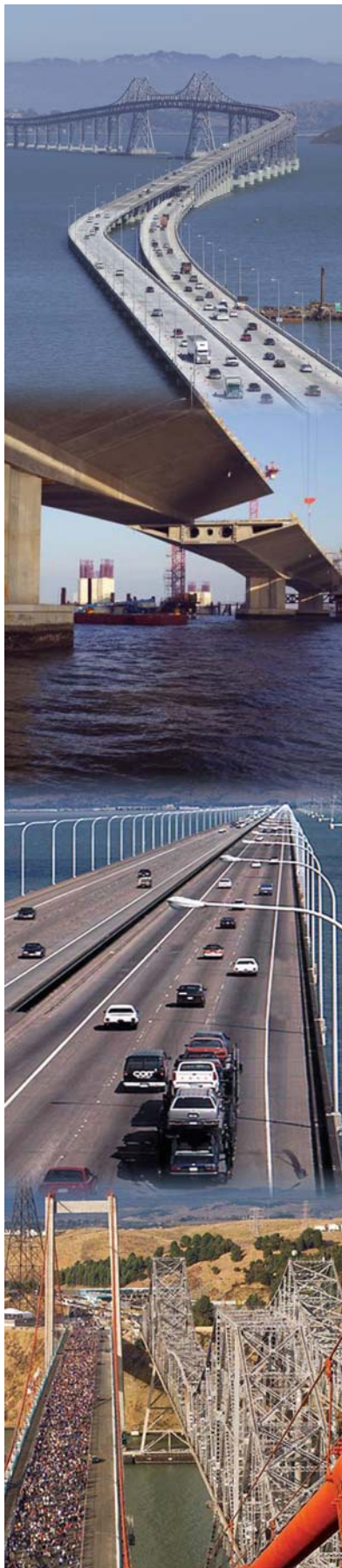


*Antioch Bridge*



*Dumbarton Bridge*





## PROJECT / CONTRACT REPORTS

### Regional Measure 1 Program

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#### New Benicia-Martinez Bridge Project Summary

- New Benicia-Martinez Bridge Contract
- Other Contracts and Related Project Activities

#### New Carquinez Bridge Project

#### Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Project

#### Richmond-San Rafael Bridge Trestle Deck Overlay Project

#### Interstate 880 / State Route 92 Interchange Reconstruction

#### Other Completed Regional Measure 1 Projects

- San Mateo-Hayward Bridge Widening Project
- Richmond Parkway Project
- Bayfront Expressway Widening Project

## Regional Measure 1 Program

### New Benicia-Martinez Bridge Project Summary

**Project Description:** The new Benicia-Martinez Bridge project constructs a new parallel bridge just east of the existing bridge. The project will include reconstructed interchanges to the north and south of the bridges and a new toll plaza and administration building in Martinez.

#### New Benicia-Martinez Bridge Project Cost Summary (\$Millions)

| Contract   | June 2005<br>BATA Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|--|--------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a  | b                        | c                   | d = b + c         | e                         | f                         | g = f - d |
| Capital Outlay Support                           | 157.1                    | 21.1                | 178.2             | 140.4                     | 178.2                     | -         |
| Right-of-Way and Others                          | 20.4                     | (0.1)               | 20.3              | 12.0                      | 20.3                      | -         |
| Capital Outlay Construction                      |                          |                     |                   |                           |                           | -         |
| New Bridge*                                      | 672.0                    | 112.0               | 784.0             | 569.7                     | 784.0                     | -         |
| I-680/I-780 Interchange<br>Replacement*          | 76.3                     | 16.1                | 92.4              | 67.9                      | 92.4                      | -         |
| I-680/Marina Vista Interchange<br>Reconstruction | 51.5                     | 3.4                 | 54.9              | 51.3                      | 54.9                      | -         |
| New Toll Plaza                                   | 24.3                     | 2.0                 | 26.3              | 17.6                      | 26.3                      | -         |
| Other  | 37.5                     | 9.6                 | 47.1              | 15.0                      | 47.1                      | -         |
| Project Reserve                                  | 20.8                     | 39.0                | 59.8              | -                         | 59.8                      | -         |
| <b>TOTAL</b>                                     | <b>1,059.9</b>           | <b>203.1</b>        | <b>1,263.0</b>    | <b>873.9</b>              | <b>1,263.0</b>            | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

\* The budget and estimate at completion includes approximately \$33 million in non-toll bridge funds (Proposition 192 and SHOPP).

#### New Benicia-Martinez Bridge Project Schedule Summary

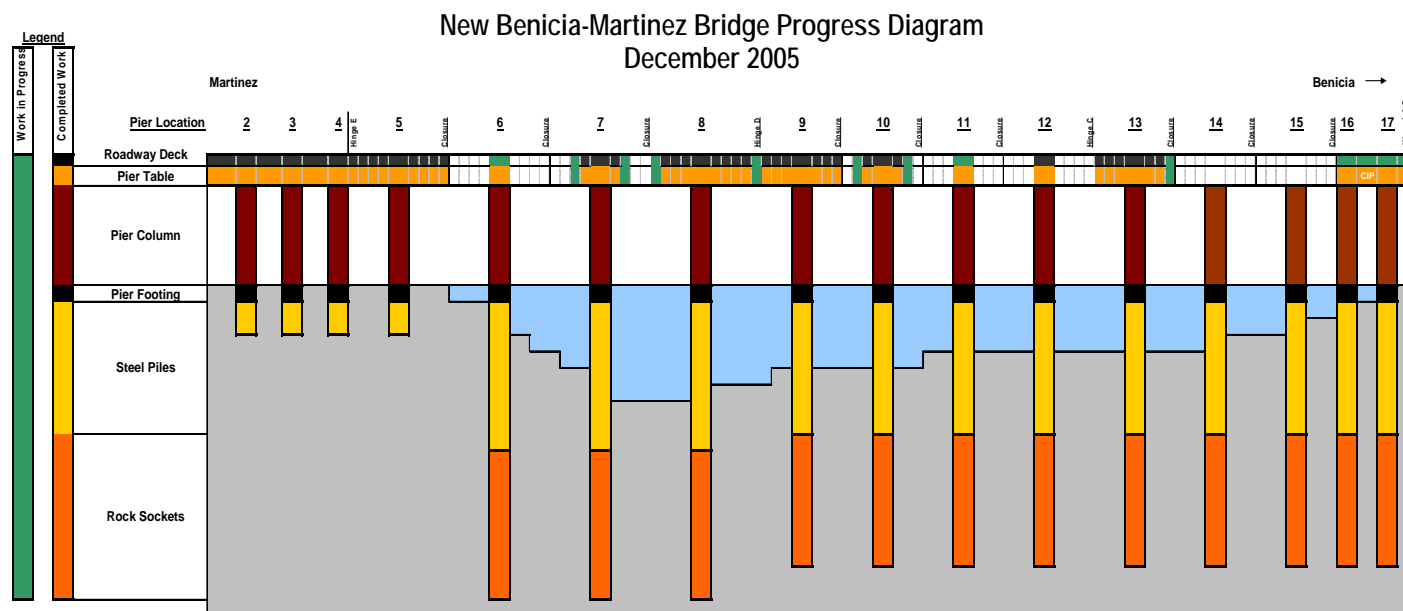
| Project                                       | Baseline Project<br>Completion Date | Forecast Project<br>Completion Date | Variance<br>(Months) |
|---|-------------------------------------|-------------------------------------|----------------------|
| I-680/Marina Vista Interchange Reconstruction | March 2006                          | March 2006                          | -                    |
| New Toll Plaza                                | June 2006                           | August 2006                         | 2                    |
| New Benicia-Martinez Bridge                   | December 2007                       | December 2007                       | -                    |
| I-680/I-780 Interchange Replacement           | December 2007                       | February 2008                       | 2                    |
| Open to Traffic                               | December 2007                       | December 2007                       | -                    |

**Project Status:** All major construction projects necessary to open the bridge are currently in construction. Numerous foundation and superstructure issues have significantly delayed the new bridge contract. See the following contract detail pages for more information. Note that the remaining expenditures required on the "Right-of-Way and Others" category represents environmental permitting and mitigation. On December 21, 2005, BATA approved a budget increase resulting in a revised total of \$1.263 billion.

**Project Issues**

| Issue  | Mitigating Action  |
|--|--|
| To open the bridge, Caltrans will have to coordinate opening and close-out activities among the different contractors that will be active on the project. These activities including structural bridge and electrical tie-ins have been complicated by the delays to the new bridge. As identified in Caltrans Risk Management Plan, these delays also may further escalate support and material costs on the project. | Based on the Caltrans Risk Management Plan, BATA has budgeted a program contingency to fund these potential increases. Caltrans also is completing a comprehensive schedule of all activities necessary to open the new bridge to traffic. As necessary, Caltrans will be negotiating with their contractors to resolve any final opening and close-out activities to open the bridge. |

**Recent TBPOC Actions:** See the following contract detail pages for more information.

**Project Photographs**

*Benicia Toll Plaza - Toll Plaza Courtyard Canopy Steel*



*Marina Vista - Retaining Wall #1 Finishing & EPS Installation*

## Regional Measure 1 Program

### New Benicia-Martinez Bridge Project

#### ► NEW BENICIA-MARTINEZ BRIDGE CONTRACT

**Contract Description:** The new bridge contract constructs a new cast-in-place segmentally constructed reinforced concrete bridge just east of the existing bridge. The new bridge will carry five lanes of eastbound I-680 traffic towards Benicia.

#### New Benicia-Martinez Bridge Cost Summary (\$Millions)

| Contract                    | June 2005<br>BATA<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|-----------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a                           | b                           | c                   | d = b + c         | e                         | f                         | g = f - d |
| New Benicia-Martinez Bridge |                             |                     |                   |                           |                           |           |
| Capital Outlay Support      | 84.9                        | 7.3                 | 92.2              | 68.5                      | 92.2                      | -         |
| Capital Outlay Construction | 672.0                       | 112.0               | 784.0             | 569.7                     | 784.0                     | -         |
| <b>TOTAL</b>                | <b>756.9</b>                | <b>119.3</b>        | <b>876.2</b>      | <b>638.2</b>              | <b>876.2</b>              | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

#### New Benicia-Martinez Bridge Schedule Summary

| Contract                    | Baseline Contract<br>Completion Date | Forecast Contract<br>Completion Date | Variance (Months) |
|-----------------------------|--------------------------------------|--------------------------------------|-------------------|
| New Benicia-Martinez Bridge | December 2007                        | December 2007                        | -                 |

**Contract Status:** The contract is 83 % complete. The superstructure concrete is in place and post tensioned from the south abutment to pier 4, and barrier rail construction is in progress. Superstructure segments have been cast at piers 5 and 9, while segments are being cast at piers 7, 8, 10 and 13. In order to maintain concrete temperature within the specified limits, cooling tubes are being installed in the segments and a nitrogen station is in operation for cooling the concrete in the delivery trucks. 138 of 344 segments are complete as of the end of November 2005, for the above mentioned piers. Ten tower cranes are installed and operational. Pier table construction continues at piers 6 and 11, and column construction is complete at piers 14 and 15. For Frame 4 cast on falsework, barrier rails, approach slab work, isolation casing covers, grading for drainage and slope paving are complete, however, approximately 10% of the deck surface was not acceptable. Contractor is currently investigating deck repair options (epoxy versus polyester overlay), and began repair work at the toe of the barrier rail. On Frame 1 Cast-on Falsework, the bottom slab in span 16 and the bottom slab of P17 diaphragm are complete. Continued work on forms, rebar and PT in stem walls of Spans 15, 16 and 17, including the Span 16 intermediate diaphragm.



**Contract Issues**

| Issue  | Mitigating Action  |
|--|--|
| <p>Over the next seven months, construction of the first of two mid-span hinges will occur. At the present time, there are no issues presently facing the project associated with hinge construction. However, these hinges represent a unique and complex element of the bridge construction.</p> <p>There are several areas of concern in the construction of this first hinge. Risk items include: superstructure alignment/geometry control, steel box girder alignment, rebar congestion, and bearing installation.</p> | <p>Over the last several months, meetings with the contractor and Caltrans staff were held to identify potential problem areas, as well as appropriate solutions to these issues should they occur. Also, the pedestal endpoints will be under continuous survey control and measurement to detect any trends in alignment and deflections. These actions will continue throughout the construction of the hinges.</p> |

**Recent TBPOC Actions:** In October 2005, the TBPOC approved CCO's #109.4 (Pile Construction Joint Reparation), #110.5 (Pile Anomaly Repair) and #133.1 (Heat of Hydration). In November 2005, the TBPOC approved CCO #117.1 (Steel Escalation). In aggregate, these CCOs added \$70.5 million in cost and extended the contract schedule by 3 months, which was already included in the baseline contract completion date.

**Contract Photographs**

*New Bridge Work Areas at Frames 1 & 2*



*New Bridge Piers 7, 8 & 9 (right to left)*



*New Bridge Frame 5 looking South*



*New Bridge Hinge between Frames 4 & 5*

## Regional Measure 1 Program

**New Benicia-Martinez Bridge Project Summary**► **OTHER CONTRACTS AND RELATED PROJECT ACTIVITIES**

**Contract Description:** Contracts related to the new Benicia-Martinez Bridge project involve the construction of a new toll plaza south of the new bridge in Contra Costa County with 17 toll booths, including two high-occupancy vehicle (HOV) bypass lanes, and the reconstruction of the I-680/Marina Vista Road and I-680/I-780 interchanges.

**Other Contracts and Related Activities Cost Summary (\$Millions)**

| Contract   | June 2005<br>BATA<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|--|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a  | b                           | c                   | d = b + c         | e                         | f                         | g = f - d |
| Capital Outlay Support                           | 72.2                        | 13.8                | 86.0              | 71.9                      | 86.0                      | -         |
| Right-of-Way and Environmental<br>Mitigation     | 20.4                        | (0.1)               | 20.3              | 12.0                      | 20.3                      | -         |
| Capital Outlay Construction                      |                             |                     |                   |                           |                           | -         |
| I-680/I-780 Interchange Replacement              | 76.3                        | 16.1                | 92.4              | 67.9                      | 92.4                      | -         |
| I-680/Marina Vista Interchange<br>Reconstruction | 51.5                        | 3.4                 | 54.9              | 51.3                      | 54.9                      | -         |
| New Toll Plaza                                   | 24.3                        | 2.0                 | 26.3              | 17.6                      | 26.3                      | -         |
| Others   | 37.5                        | 9.6                 | 47.1              | 15.0                      | 47.1                      | -         |
| Total Capital Outlay Construction                | 189.6                       | 31.1                | 220.7             | 151.8                     | 220.7                     | -         |
| <b>TOTAL</b>                                     | <b>282.2</b>                | <b>44.8</b>         | <b>327.0</b>      | <b>235.7</b>              | <b>327.0</b>              | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

**Other Contracts and Related Activities Schedule Summary**

| Project  | Baseline Project<br>Completion Date | Forecast Project<br>Completion Date | Variance<br>(Months) |
|--|-------------------------------------|-------------------------------------|----------------------|
| I-680/Marina Vista Interchange<br>Reconstruction | March 2006                          | March 2006                          | -                    |
| New Toll Plaza                                   | June 2006                           | August 2006                         | 2                    |
| I-680/I-780 Interchange Replacement              | December 2007                       | February 2008                       | 2                    |



**Contract Status:**

**Toll Plaza and Administration Building:** The contract is 78 % complete. The Contractor started to install the metal railings on the stairs and installation of the range hood and cooking top at the break rooms at the Operations Building. The roofing system work on the Toll Plaza Canopy also commenced with the completion of the installation of the plywood panel backings for the roof along the parapet, and the roofing system scheduled to be installed in the first week of December 2005. Work continued on the installation of the elevator at Toll Island #9, installation of aluminum window frames for the Toll Booths, installation of ATCAS and electrical conduits at the Toll Plaza Canopy and the CCTV System at the Tunnel. Painting preparation work completed and commenced final coating application for the tunnel walls and ceilings. The Contractor installed all the main beams and columns of the Courtyard Canopy, but bolting and welding was temporarily suspended due to Contractor fabrication and design errors. Repairs of these beams are on-going off site and the beams are scheduled for orange tag release in early December 2005. The forecast delay in the completion of this contract of two additional months from the November 2005 monthly report is due to lack of progress by the contractor.

**I-680/I-780 Interchange:** The contract is approximately 82% complete. All footings, bents, and columns for Bridge 215, which is the northbound I-680 connection from pier 17, are complete, and superstructure works are in progress. The Contractor continued to build the trestle for Span 17 falsework. All foundations, bents, and columns for bridges 212 and 214, the westbound I-780 connector, are complete. Superstructure work is in progress for bridge 212, with Spans 20, 19 and 18 soffits and stems poured during the report period. Lost deck operation for Span 21 is in progress. The completion of final electrical work is delayed until April 2008.

**I-680/Marina Vista Interchange:** The contract is approximately 93% complete. While falsework removals for the Mococo Overhead Bridge and the On Ramp Bridge have been completed, and falsework materials continued to be demobilized from the jobsite. The last concrete pour for the Retaining Wall #1 stem wall was completed on November 16, 2005. Class 1 finishing of the walls is on-going. On November 2, 2005, the Contractor commenced placement of the Expandable Polystyrene (EPS) Block along the CCNB line between Station 97+00 and the Mococo Overhead On-Ramp Bridge. This work is currently in-progress. Installation of permanent traffic signs at Mococo Road was started and pulling conductor wires for the street and signal light at Waterfront Road and the NB/SB Off-Ramp/On-Ramp intersection continued.

**Wetland Mitigation:** The contract is 98% complete and is scheduled for completion in February 2006. Excavation and off-haul work for the access road has been completed. Ballast work was done under the direction of UPRR.

**Contract Issues**

| Issue   | Mitigating Action  |
|---|--|
| The estimate at completion for the project was significantly higher than the previous budget for the project. Caltrans identified significant potential cost increases due to a number of issues, including schedule impacts resulting from a delay to the new bridge contract. | The potential cost increases were incorporated into a new estimate at completion, which was the basis for a revised funding request approved by BATA on December 21, 2005. BATA staff has also directed BATA's consultant team to reforecast the entire project cost to identify any additional costs. |

**Recent TBPOC Actions:** In October 2005, concerning the I-680/Marina Vista Interchange, the TBPOC approved CCO's #25 (Contaminated Soils), and #31 (Water Treatment). Concerning the I-680/I-780 Interchange, the TBPOC approved CCO's #37.2 (Bent 14 Differing Site Conditions), and 70 (Bent 18 Differing Site Conditions). In aggregate, these CCOs added \$4.3 million in cost.

## Regional Measure 1 Program

### New Carquinez Bridge Project

**Project Description:** The new Carquinez Bridge project involves constructing a new suspension bridge west of the existing bridges with four westbound lanes and a bicycle/pedestrian lane and demolishing the existing 1927 bridge.

#### New Carquinez Bridge Cost Summary (\$Millions)

| Contract                         | June 2005<br>BATA Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance  |
|----------------------------------|--------------------------|---------------------|-------------------|---------------------------|---------------------------|-----------|
| a                                | b                        | c                   | d = b + c         | e                         | f                         | g = f - d |
| Capital Outlay Support           | 124.4                    | -                   | 124.4             | 114.0                     | 125.4                     | 1.0       |
| Capital Outlay Construction      |                          |                     |                   |                           |                           | -         |
| Replacement Bridge               | 253.3                    | -                   | 253.3             | 253.0                     | 256.3                     | 3.0       |
| South Interchange Reconstruction | 73.9                     | -                   | 73.9              | 71.8                      | 73.9                      | -         |
| Existing 1927 Bridge Demolition  | 35.2                     | -                   | 35.2              | 16.0                      | 35.2                      | -         |
| Other                            | 29.3                     | -                   | 29.3              | 25.2                      | 28.4                      | (0.9)     |
| Project Reserve                  | 12.1                     | -                   | 12.1              | -                         | 9.0                       | (3.1)     |
| <b>TOTAL</b>                     | <b>528.2</b>             | <b>-</b>            | <b>528.2</b>      | <b>480.0</b>              | <b>528.2</b>              | <b>-</b>  |

*Note: Details may not sum to totals due to rounding effects.*

#### New Carquinez Bridge Schedule Summary

| Contract                         | Baseline Project<br>Completion Date | Forecast Project<br>Completion Date | Variance (Months) |
|----------------------------------|-------------------------------------|-------------------------------------|-------------------|
| New Carquinez Bridge             | November 2003*                      | November 2003*                      | -                 |
| 1927 Carquinez Bridge Demolition | December 2007                       | September 2007                      | (3)               |
| Landscaping                      | August 2011                         | August 2011                         | -                 |

\* The date shown is for the opening of the bridge to traffic.

**Project Status:** The Demolition contract is approximately 24% complete based on time and schedule. However, it is approximately 54% complete based on payment, because the big cost items in the contract were works involving the 1958 bridge approach slab replacement, which has been completed. Traffic was switched back onto the 1958 bridge on November 10, 2005. The replacement bridge and all its approaches are complete and opened to traffic. Preparation for the demolition of the 1927 bridge is on-going, with the retrofitting of the existing state travelers and the installation of protective covers for Unit 3 in progress. Work continued on the 1958 bridge approach on the steel retrofit and rivet removal, installation of the electrolier, and the removal of the overhang forms and stair towers at Bent 11 and 13.

#### Project Issues:

| Issue  | Mitigating Action   |
|--|---|
| On the Replacement Carquinez Bridge Contract, the Contractor has submitted claims for various contract issues, including claims on fabrication, labor, and access. | Caltrans is in the process of evaluating the merits of the final claims. BATA staff will direct BATA's consultant team to also evaluate the claims to determine project risk. Project reserves may need to be used. |

**Project Photographs***1958 Carquinez Bridge Approach New Deck Surface**1958 Carquinez Bridge Approach Seismic Monitoring Pit**New Carquinez Bridge 1**New Carquinez Bridge 2**Sections of the 1927 and 1958 Carquinez Bridge 1**Sections of the 1927 and 1958 Carquinez Bridge 2*

## Regional Measure 1 Program

### **Richmond-San Rafael Bridge (RSRB) Trestle, Fender, and Deck Joint Rehabilitation Project**

**Project Description:** This contract involves replacing the western trestle section of the bridge near San Rafael, rehabilitating the ship collision fender system at various piers, and rehabilitation of joints on the bridge deck.

#### **RSRB Trestle, Fender, and Deck Joint Rehabilitation Cost Summary (\$Millions)**

| Contract                                      | June 2005<br>BATA Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance     |
|---|--------------------------|---------------------|-------------------|---------------------------|---------------------------|--------------|
| a   | b                        | c                   | d = b + c         | e                         | f                         | g = f - d    |
| RSR Trestle, Fender, and Joint Rehabilitation |                          |                     |                   |                           |                           |              |
| Capital Outlay Support                        | 10.8                     | -                   | 10.8              | 11.8                      | 12.6                      | 1.8          |
| Capital Outlay Construction                   | 91.3                     | -                   | 91.3              | 83.1                      | 84.4                      | (6.9)        |
| Project Reserve                               | -                        | -                   | -                 | -                         | -                         | -            |
| <b>TOTAL</b>                                  | <b>102.1</b>             | <b>-</b>            | <b>102.1</b>      | <b>94.9</b>               | <b>97.0</b>               | <b>(5.1)</b> |

*Note: Details may not sum to totals due to rounding effects.*

*The Deck Joint Rehabilitation work is funded from RM1 and from Toll Bridge Seismic Retrofit Program (\$16.9 million) funds. In July 2005, BATA rescinded \$16.9 million in RM1 funds from the deck joint project. An equivalent amount of seismic retrofit funding will be used on the project. This action was taken to make additional RM 1 funds available for the Benicia-Martinez Bridge New Span project. The budget for the Richmond-San Rafael Bridge Seismic Retrofit project, shown on page 25 of this report, includes \$16.9 million of costs for the deck joint rehabilitation work.*

#### **RSRB Trestle, Fender, and Deck Joint Rehabilitation Schedule Summary**

| Contract  | Baseline Contract<br>Completion Date | Forecast Contract<br>Completion Date | Variance (Months) |
|---|--------------------------------------|--------------------------------------|-------------------|
| Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation | August 2005                          | August 2005                          | -                 |

**Project Status:** Work on this project is completed.

**Project Issues:** None

#### **Project Photographs**



*Repaired Deck Joints-Lower Deck*



*Richmond-San Rafael Trestle*



## Regional Measure 1 Program

### Richmond-San Rafael Bridge (RSRB) Deck Overlay Project

**Project Description:** Rehabilitate the existing concrete deck on the bridge, damaged due to traffic and exposure to a marine environment.

#### RSRB Deck Overlay Cost Summary (\$Millions)

| Contract                    | June 2005<br>BATA Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance   |
|-----------------------------|--------------------------|---------------------|-------------------|---------------------------|---------------------------|------------|
| a                           | b                        | c                   | d = b + c         | e                         | f                         | g = f - d  |
| RSR Deck Overlay            |                          |                     |                   |                           |                           |            |
| Capital Outlay Support      | 8.0                      | -                   | 8.0               | 1.5                       | 8.0                       | -          |
| Capital Outlay Construction | 16.9                     | -                   | 16.9              | -                         | 20.7                      | 3.8        |
| <b>TOTAL</b>                | <b>24.9</b>              | <b>-</b>            | <b>24.9</b>       | <b>1.5</b>                | <b>28.7</b>               | <b>3.8</b> |

*Note: Details may not sum to totals due to rounding effects.*

#### RSRB Deck Overlay Schedule Summary

| Contract  | Baseline Contract<br>Completion Date | Forecast Contract<br>Completion Date | Variance (Months) |
|---|--------------------------------------|--------------------------------------|-------------------|
| Richmond-San Rafael Bridge Deck Overlay<br>Rehabilitation | January 2007                         | January 2007                         | -                 |

**Project Status:** This project is Ready to List. Design is complete, and will be advertised upon approval of funding. BAMC staff has completed an independent estimate review of the Caltrans project estimate, and has submitted to BATA for presentation to Caltrans management.

#### Project Issues:

| Issue  | Mitigating Action  |
|--|--|
| Caltrans has reported a higher than budgeted estimate for the project. | BATA staff will review the revised estimate for the project to determine an appropriate recommendation to BATA. Additional funds may be required from the BATA Toll Bridge Rehabilitation Program. |

#### Project Photographs



RSR Concrete Deck Overlay



## Regional Measure 1 Program

**Interstate 880/State Route 92 Interchange Reconstruction Project**

**Project Description:** Modify the existing cloverleaf interchange to increase capacity and improve safety and traffic operations.

**Interstate 880/State Route 92 Interchange Cost Summary (\$Millions)**

| Contract                            | June 2005<br>BATA<br>Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance    |
|-------------------------------------|-----------------------------|---------------------|-------------------|---------------------------|---------------------------|-------------|
| a                                   | b                           | c                   | d = b + c         | e                         | f                         | g = f - d   |
| I-880/SR-92 Interchange Improvement |                             |                     |                   |                           |                           |             |
| Capital Outlay Support              | 28.8                        | -                   | 28.8              | 25.8                      | 43.2                      | 14.4        |
| Capital Outlay Construction         | 94.8                        | -                   | 94.8              | -                         | 119.0                     | 24.2        |
| Capital Outlay Right-of-Way         | 9.9                         | -                   | 9.9               | 7.3                       | 13.0                      | 3.1         |
| Project Reserve                     | 0.3                         | -                   | 0.3               | -                         | 11.1                      | 10.8        |
| <b>TOTAL</b>                        | <b>133.8</b>                | <b>-</b>            | <b>133.8</b>      | <b>33.1</b>               | <b>186.3</b>              | <b>52.5</b> |

*Note: Details may not sum to totals due to rounding effects. \$9.6 million in ACTA funds included under Capital Outlay Construction. \$3.7 million included in Capital Outlay Construction for separate landscape contract.*

**Interstate 880/State Route 92 Interchange Schedule Summary**

| Project                                | Baseline Project<br>Completion Date | Forecast Project<br>Completion Date | Variance (Months) |
|--|-------------------------------------|-------------------------------------|-------------------|
| I-880/SR-92 Interchange Reconstruction | November 2010                       | December 2010                       | 1                 |

**Project Status:** Design is 95% complete. Caltrans continues work on the preparation of the PS&E package with 100% completion re-scheduled from January 10, 2006 to March 1, 2006. Contract package is scheduled to be advertised by August 2006 and start of construction in November 2006. Design work is being delayed further due to resolution of utility conflicts, and design and construction staging refinements. Additional utility easements may be necessary, and it will not be known until Caltrans receives the utility relocation plans from the utility companies. Caltrans continues to be in close contact with the utility companies to resolve the conflicts. Caltrans is pursuing offsite third party wetland mitigation due to 1) limited areas within the project limits that is suitable to accommodate the wetland mitigation ratio of 3:1 required the Water Board and 2) as a means of avoiding future maintenance costs. Additional right of way funds will be required to pay for off-site wetland mitigation. Right-of-way acquisition is in progress. Current right of way parcel count is 70 parcels. Of these, right of way from 50 parcels has been acquired. Caltrans is working with PG&E on the relocation of 6 poles near Lindenwood Way. Undergrounding the utilities at this location is likely. Demolition of 10 of the 12 homes is now scheduled to begin in January 2006. The remaining 2 homes may be sold with proceeds going back into the project. \$1.4 million in federal SAFETEA funds have been earmarked for this project.

**Project Issues:**

| Issue   | Mitigating Action   |
|---|---|
| Later than anticipated approval of the environmental clearance documents has delayed project delivery by 14 months. This delay among other reasons has contributed to an increase in estimated costs due to escalation. | BATA and Caltrans will perform a complete re-evaluation of the schedule impact with the issuance of the 100% PS&E, and will also determine work-around options that would mitigate the delay to the project. BATA will also review the entire project cost with the 100% PS&E.  |
| The forecast schedule includes an aggressive schedule for right-of-way acquisition that provides for 18 months to clear numerous parcels in the project area.   | The impact of right-of-way acquisitions on the schedule will be determined during the previously mentioned schedule assessment. Workarounds will be considered if it can prevent possible delay to the construction start. The construction contract will be advertised with an A+B specification, which could reduce the construction duration and recover the project schedule. |

## Regional Measure 1 Program

### Other Completed Regional Measure 1 (RM1) Projects

**Summary Description:** Other completed Regional Measure 1 projects are the following: (a) Widen the San Mateo-Hayward Bridge along its low-trestle section and its eastern approach, (b) Widen the Bayfront Expressway (SR 84) from the Dumbarton Bridge to the U.S. 101/Marsh Road interchange, (c) Construct an eastern approach (Richmond Parkway) between the Richmond-San Rafael Bridge and Interstate 80 near Pinole, and (d) Modify the U.S. 101/University Avenue interchange.

#### Other Completed RM1 Projects Cost Summary (\$Millions)

| Contract                                  | June 2005<br>BATA Budget | Approved<br>Changes | Current<br>Budget | Cost To Date<br>(11/2005) | Estimate at<br>Completion | Variance     |
|---|--------------------------|---------------------|-------------------|---------------------------|---------------------------|--------------|
| a   | b                        | c                   | d = b + c         | e                         | f                         | g = f - d    |
| San Mateo-Hayward Bridge Widening Project | 217.8                    | -                   | 217.8             | 208.5                     | 211.9                     | (5.9)        |
| Bayfront Expressway Widening Project      | 35.3                     | -                   | 35.3              | 33.0                      | 34.9                      | (0.4)        |
| Richmond Parkway Project                  | 5.9                      | -                   | 5.9               | 3.9                       | 5.9                       | -            |
| U.S. 101/University Interchange           | 3.8                      | -                   | 3.8               | 3.7                       | 3.8                       | -            |
| <b>TOTAL</b>                              | <b>262.8</b>             | <b>-</b>            | <b>262.8</b>      | <b>249.1</b>              | <b>256.5</b>              | <b>(6.3)</b> |

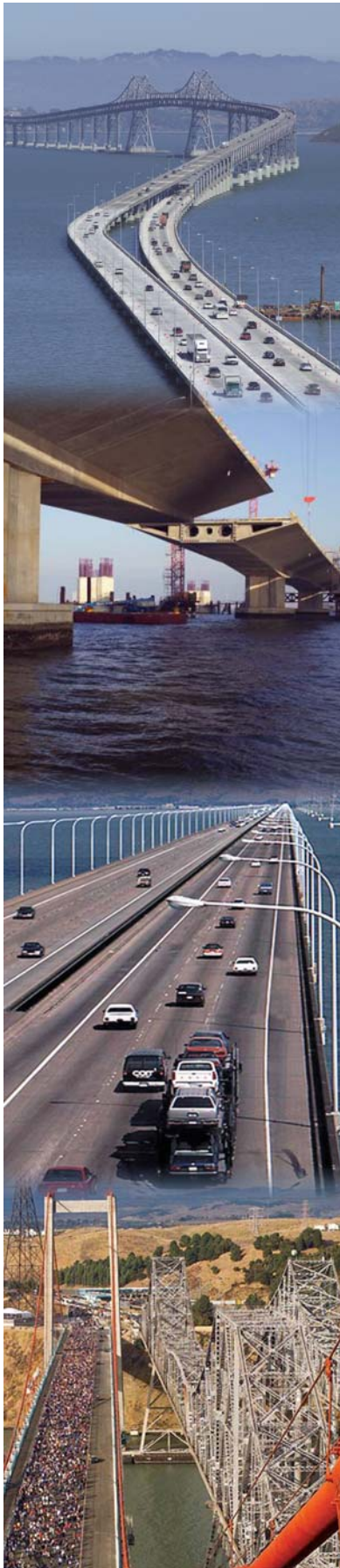
#### Schedule Summary

| Project                                   | Actual Project<br>Completion Date |
|---|-----------------------------------|
| Richmond Parkway Project                  | May 2001                          |
| San Mateo-Hayward Bridge Widening Project | February 2003                     |
| Bayfront Expressway Widening Project      | January 2004                      |
| U.S. 101/University Interchange           | April 2004                        |

**Project Status:** Construction has been completed on the above listed contracts.

**Project Issues:** None.

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## APPENDICES

- A** Toll Bridge Seismic Retrofit Program:  
San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost  
Detail
- B** Toll Bridge Seismic Retrofit Program Cost Detail
- C** Toll Bridge Seismic Retrofit Program Summary Schedule
- D** Regional Measure 1 Program Cost Detail
- E** Regional Measure 1 Program Summary Schedule

## Appendix A: Toll Bridge Seismic Retrofit Program (\$Millions)

**San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail**

| Contract  | EA Number     | AB 144 /<br>SB 66 Budget | Approved<br>Changes | Current Budget | Actual Cost To<br>Date (11/2005) | Estimate at<br>Completion | At-Completion<br>Variance |
|---|---------------|--------------------------|---------------------|----------------|----------------------------------|---------------------------|---------------------------|
| a   | b             | c                        | d                   | e = c + d      | f                                | g                         | h = g - e                 |
| <b>San Francisco-Oakland Bay Bridge East Span Replacement Project</b> |               |                          |                     |                |                                  |                           |                           |
| <b>East Span - Skyway</b>   | <b>01202X</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 197.0                    | -                   | 197.0          | 117.6                            | 197.0                     | -                         |
| Capital Outlay Construction   |               | 1,293.0                  | -                   | 1,293.0        | 946.0                            | 1,293.0                   | -                         |
| <b>Total</b>  |               | 1,490.0                  | -                   | 1,490.0        | 1,063.6                          | 1,490.0                   | -                         |
| <b>East Span - SAS Superstructure</b>                                 | <b>0120FX</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 214.6                    | -                   | 214.6          | 15.5                             | 214.6                     | -                         |
| Capital Outlay Construction   |               | 1,753.7                  | -                   | 1,753.7        | -                                | 1,767.4                   | 13.7                      |
| <b>Total</b>  |               | 1,968.3                  | -                   | 1,968.3        | 15.5                             | 1,982.0                   | 13.7                      |
| <b>East Span - SAS E2/T1 Foundations</b>                              | <b>0120EX</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 52.5                     | -                   | 52.5           | 7.5                              | 52.5                      | -                         |
| Capital Outlay Construction   |               | 313.5                    | -                   | 313.5          | 65.6                             | 313.5                     | -                         |
| <b>Total</b>  |               | 366.0                    | -                   | 366.0          | 73.1                             | 366.0                     | -                         |
| <b>SAS W2 Foundations</b>   | <b>0120CX</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 10.0                     | -                   | 10.0           | 9.2                              | 10.0                      | -                         |
| Capital Outlay Construction   |               | 26.4                     | -                   | 26.4           | 25.7                             | 26.4                      | -                         |
| <b>Total</b>  |               | 36.4                     | -                   | 36.4           | 34.9                             | 36.4                      | -                         |
| <b>YBI Transition Structures</b>                                      | <b>0120PX</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 78.7                     | -                   | 78.7           | 7.5                              | 78.7                      | -                         |
| Capital Outlay Construction   |               | 299.3                    | -                   | 299.3          | -                                | 318.4                     | 19.1                      |
| <b>Total</b>  |               | 378.0                    | -                   | 378.0          | 7.5                              | 397.1                     | 19.1                      |
| <b>Oakland Touchdown</b>  | <b>01204X</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 74.4                     | -                   | 74.4           | 19.0                             | 92.1                      | 17.7                      |
| Capital Outlay Construction   |               | 283.8                    | -                   | 283.8          | -                                | 272.7                     | (11.1)                    |
| <b>Total</b>  |               | 358.2                    | -                   | 358.2          | 19.0                             | 364.8                     | 6.6                       |
| <b>YBI South/South Detour</b>   | <b>0120RX</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 29.5                     | -                   | 29.5           | 13.5                             | 29.5                      | -                         |
| Capital Outlay Construction   |               | 131.9                    | -                   | 131.9          | 29.3                             | 133.8                     | 1.9                       |
| <b>Total</b>  |               | 161.4                    | -                   | 161.4          | 42.8                             | 163.3                     | 1.9                       |
| <b>Existing Bridge Demolition</b>                                     | <b>01209X</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 79.7                     | -                   | 79.7           | 0.2                              | 79.7                      | -                         |
| Capital Outlay Construction   |               | 239.2                    | -                   | 239.2          | -                                | 222.0                     | (17.2)                    |
| <b>Total</b>  |               | 318.9                    | -                   | 318.9          | 0.2                              | 301.7                     | (17.2)                    |
| <b>YBI/SAS Archeology</b>   | <b>01207X</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support  |               | 1.1                      | -                   | 1.1            | 1.1                              | 1.1                       | -                         |
| Capital Outlay Construction   |               | 1.1                      | -                   | 1.1            | 1.1                              | 1.1                       | -                         |
| <b>Total</b>  |               | 2.2                      | -                   | 2.2            | 2.2                              | 2.2                       | -                         |

Note: Details may not sum to totals due to rounding



## Appendix A: Toll Bridge Seismic Retrofit Program (\$Millions)

**San Francisco-Oakland Bay Bridge (SFOBB) East Span Replacement Project Cost Detail (Cont.)**

| Contract   | EA Number                  | AB 144 /<br>SB 66 Budget | Approved<br>Changes | Current Budget | Actual Cost To<br>Date (11/2005) | Estimate at<br>Completion | At-Completion<br>Variance |
|--|----------------------------|--------------------------|---------------------|----------------|----------------------------------|---------------------------|---------------------------|
| a  | b                          | c                        | d                   | e = c + d      | f                                | g                         | h = g - e                 |
| <b>YBI - USCG Road Relocation</b>                                      | <b>0120QX</b>              |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support   |                            | 3.0                      | -                   | 3.0            | 2.7                              | 3.0                       | -                         |
| Capital Outlay Construction  |                            | 3.0                      | -                   | 3.0            | 2.8                              | 3.0                       | -                         |
| <b>Total</b>   |                            | 6.0                      | -                   | 6.0            | 5.5                              | 6.0                       | -                         |
| <b>YBI - Substation and Viaduct</b>                                    | <b>0120GX</b>              |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support   |                            | 6.5                      | -                   | 6.5            | 6.3                              | 6.5                       | -                         |
| Capital Outlay Construction  |                            | 11.6                     | -                   | 11.6           | 11.2                             | 11.6                      | -                         |
| <b>Total</b>   |                            | 18.1                     | -                   | 18.1           | 17.5                             | 18.1                      | -                         |
| <b>Oakland Geofill</b>   | <b>01205X</b>              |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support   |                            | 2.5                      | -                   | 2.5            | 2.5                              | 2.5                       | -                         |
| Capital Outlay Construction  |                            | 8.2                      | -                   | 8.2            | 8.2                              | 8.2                       | -                         |
| <b>Total</b>   |                            | 10.7                     | -                   | 10.7           | 10.7                             | 10.7                      | -                         |
| <b>Pile Installation Demonstration Project</b>                         | <b>01208X</b>              |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support   |                            | 1.8                      | -                   | 1.8            | 1.8                              | 1.8                       | -                         |
| Capital Outlay Construction  |                            | 9.2                      | -                   | 9.2            | 9.2                              | 9.2                       | -                         |
| <b>Total</b>   |                            | 11.0                     | -                   | 11.0           | 11.0                             | 11.0                      | -                         |
| <b>Stormwater Treatment Measures</b>                                   | <b>0120JX</b>              |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support   |                            | 6.0                      | -                   | 6.0            | 3.9                              | 6.0                       | -                         |
| Capital Outlay Construction  |                            | 15.0                     | -                   | 15.0           | -                                | 15.0                      | -                         |
| <b>Total</b>   |                            | 21.0                     | -                   | 21.0           | 3.9                              | 21.0                      | -                         |
| <b>Right-of-Way and Environmental Mitigation</b>                       | <b>0120X9</b>              |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support   |                            | -                        | -                   | -              | -                                | -                         | -                         |
| Capital Outlay & Right-of-Way  |                            | 72.4                     | -                   | 72.4           | 38.7                             | 72.4                      | -                         |
| <b>Total</b>   |                            | 72.4                     | -                   | 72.4           | 38.7                             | 72.4                      | -                         |
| <b>Sunk Cost - Existing East Span Retrofit</b>                         | <b>04343X &amp; 04300X</b> |                          |                     |                |                                  |                           |                           |
| Capital Outlay Support   |                            | 39.5                     | -                   | 39.5           | 39.5                             | 39.5                      | -                         |
| Capital Outlay Construction  |                            | 30.8                     | -                   | 30.8           | 30.8                             | 30.8                      | -                         |
| <b>Total</b>   |                            | 70.3                     | -                   | 70.3           | 70.3                             | 70.3                      | -                         |
| <b>Other Capital Outlay Support</b>                                    |                            |                          |                     |                |                                  |                           |                           |
| Environmental Phase  |                            | 97.7                     | -                   | 97.7           | 97.7                             | 97.7                      | -                         |
| Pre-Split Project Expenditures   |                            | 44.9                     | -                   | 44.9           | 44.9                             | 44.9                      | -                         |
| Non-project Specific Costs   |                            | 20.0                     | -                   | 20.0           | 3.2                              | 20.0                      | -                         |
| <b>Total</b>   |                            | 162.6                    | -                   | 162.6          | 145.8                            | 162.6                     | -                         |
| <b>Subtotal East Span Capital Outlay Support</b>                       |                            | 959.4                    | -                   | 959.4          | 393.6                            | 977.1                     | 17.7                      |
| <b>Subtotal East Span Capital Outlay Construction &amp; Sunk Costs</b> |                            | 4,492.1                  | -                   | 4,492.1        | 1,168.6                          | 4,498.5                   | 6.0                       |
| <b>Other Budgeted Capital</b>  |                            | 35.1                     | -                   | 35.1           | -                                | 11.0                      | (24.1)                    |
| <b>Total SFOBB East Span Replacement Project</b>                       |                            | <b>5,486.6</b>           | <b>-</b>            | <b>5,486.6</b> | <b>1,562.2</b>                   | <b>5,486.6</b>            | <b>-</b>                  |

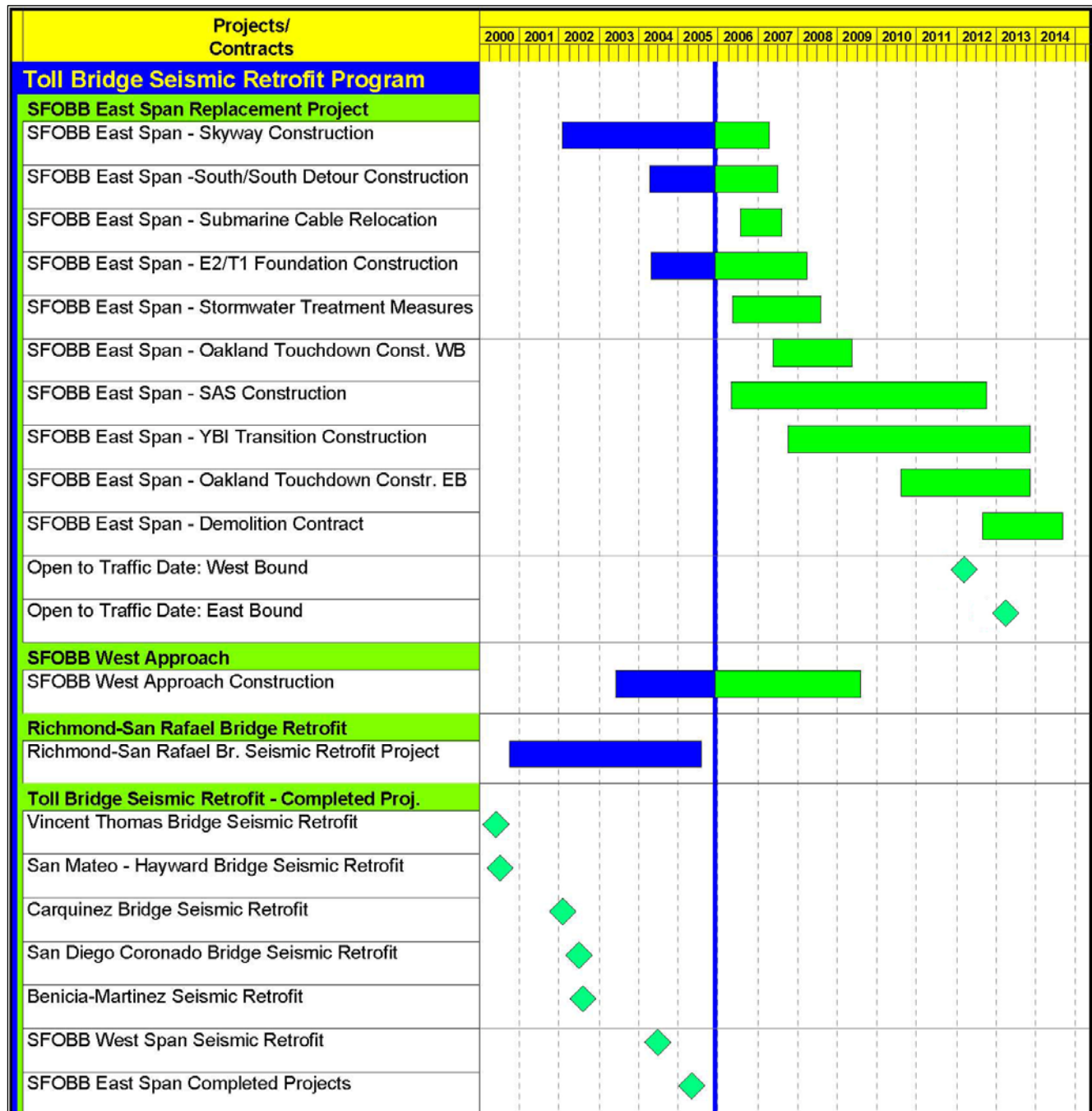
Note: Details may not sum to totals due to rounding

## Appendix B: Toll Bridge Seismic Retrofit Program Cost Detail (\$Millions)

| Project   | AB 144 /<br>SB 66<br>Budget | Approved<br>Changes | Current Budget | Actual Cost To<br>Date (11/2005) | Estimate at<br>Completion | At-Completion<br>Variance |
|---|-----------------------------|---------------------|----------------|----------------------------------|---------------------------|---------------------------|
| a   | c                           | d                   | e = c + d      | f                                | g                         | h = g - e                 |
| <b>SFOBB East Span Replacement Project</b>                |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 959.4                       | -                   | 959.4          | 393.6                            | 977.1                     | 17.7                      |
| Capital Outlay Construction                               | 4,492.1                     | -                   | 4,492.1        | 1,168.6                          | 4,498.5                   | 6.4                       |
| Other Budgeted Capital                                    | 35.1                        | -                   | 35.1           | -                                | 11.0                      | (24.0)                    |
| <b>Total</b>  | <b>5,486.6</b>              | <b>-</b>            | <b>5,486.6</b> | <b>1,562.2</b>                   | <b>5,486.6</b>            | <b>-</b>                  |
| <b>SFOBB West Approach Replacement</b>                    |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 120.0                       | -                   | 120.0          | 70.1                             | 120.0                     | -                         |
| Capital Outlay Construction                               | 309.0                       | -                   | 309.0          | 174.7                            | 309.0                     | -                         |
| <b>Total</b>  | <b>429.0</b>                | <b>-</b>            | <b>429.0</b>   | <b>244.8</b>                     | <b>429.0</b>              | <b>-</b>                  |
| <b>SFOBB West Span Retrofit</b>                           |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 75.0                        | -                   | 75.0           | 74.8                             | 75.0                      | -                         |
| Capital Outlay Construction                               | 232.9                       | -                   | 232.9          | 226.1                            | 232.9                     | -                         |
| <b>Total</b>  | <b>307.9</b>                | <b>-</b>            | <b>307.9</b>   | <b>300.9</b>                     | <b>307.9</b>              | <b>-</b>                  |
| <b>Richmond-San Rafael Bridge Retrofit</b>                |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 134.0                       | -                   | 134.0          | 122.3                            | 127.0                     | (7.0)                     |
| Capital Outlay Construction                               | 780.0                       | -                   | 780.0          | 666.1                            | 698.0                     | (82.0)                    |
| <b>Total</b>  | <b>914.0</b>                | <b>-</b>            | <b>914.0</b>   | <b>788.4</b>                     | <b>825.0</b>              | <b>(89.0)</b>             |
| <b>Benicia-Martinez Bridge Retrofit</b>                   |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 38.1                        | -                   | 38.1           | 38.1                             | 38.1                      | -                         |
| Capital Outlay Construction                               | 139.7                       | -                   | 139.7          | 139.7                            | 139.7                     | -                         |
| <b>Total</b>  | <b>177.8</b>                | <b>-</b>            | <b>177.8</b>   | <b>177.8</b>                     | <b>177.8</b>              | <b>-</b>                  |
| <b>Carquinez Bridge Retrofit</b>                          |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 28.7                        | -                   | 28.7           | 28.8                             | 28.7                      | -                         |
| Capital Outlay Construction                               | 85.5                        | -                   | 85.5           | 85.4                             | 85.5                      | -                         |
| <b>Total</b>  | <b>114.2</b>                | <b>-</b>            | <b>114.2</b>   | <b>114.2</b>                     | <b>114.2</b>              | <b>-</b>                  |
| <b>San Mateo-Hayward Bridge Retrofit</b>                  |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 28.1                        | -                   | 28.1           | 28.1                             | 28.1                      | -                         |
| Capital Outlay Construction                               | 135.4                       | -                   | 135.4          | 135.3                            | 135.4                     | -                         |
| <b>Total</b>  | <b>163.5</b>                | <b>-</b>            | <b>163.5</b>   | <b>163.4</b>                     | <b>163.5</b>              | <b>-</b>                  |
| <b>Vincent Thomas Bridge Retrofit (Los Angeles)</b>       |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 16.4                        | -                   | 16.4           | 16.3                             | 16.4                      | -                         |
| Capital Outlay Construction                               | 42.1                        | -                   | 42.1           | 42.1                             | 42.1                      | -                         |
| <b>Total</b>  | <b>58.5</b>                 | <b>-</b>            | <b>58.5</b>    | <b>58.4</b>                      | <b>58.5</b>               | <b>-</b>                  |
| <b>San Diego-Coronado Bridge Retrofit</b>                 |                             |                     |                |                                  |                           |                           |
| Capital Outlay Support                                    | 33.5                        | -                   | 33.5           | 33.2                             | 33.5                      | -                         |
| Capital Outlay Construction                               | 70.0                        | -                   | 70.0           | 69.4                             | 70.0                      | -                         |
| <b>Total</b>  | <b>103.5</b>                | <b>-</b>            | <b>103.5</b>   | <b>102.6</b>                     | <b>103.5</b>              | <b>-</b>                  |
| <b>Subtotal East Span Capital Outlay Support</b>          | <b>1,433.2</b>              | <b>-</b>            | <b>1,433.2</b> | <b>805.3</b>                     | <b>1,443.9</b>            | <b>10.7</b>               |
| <b>Subtotal East Span Capital Outlay &amp; Sunk Costs</b> | <b>6,286.7</b>              | <b>-</b>            | <b>6,286.7</b> | <b>2,707.4</b>                   | <b>6,211.1</b>            | <b>(75.6)</b>             |
| <b>Subtotal Other Budgeted Capital</b>                    | <b>35.1</b>                 | <b>-</b>            | <b>35.1</b>    | <b>-</b>                         | <b>11.0</b>               | <b>(24.0)</b>             |
| <b>Miscellaneous Program Costs</b>                        | <b>30.0</b>                 | <b>-</b>            | <b>30.0</b>    | <b>25.1</b>                      | <b>30.0</b>               | <b>-</b>                  |
| <b>Subtotal Toll Bridge Seismic Retrofit Program</b>      | <b>7,785.0</b>              | <b>-</b>            | <b>7,785.0</b> | <b>3,537.8</b>                   | <b>7,696.0</b>            | <b>(89.0)</b>             |
| <b>Program Contingency</b>                                | <b>900.0</b>                | <b>-</b>            | <b>900.0</b>   | <b>-</b>                         | <b>989.0</b>              | <b>89.0</b>               |
| <b>Total Toll Bridge Seismic Retrofit Program</b>         | <b>8,685.0</b>              | <b>-</b>            | <b>8,685.0</b> | <b>3,537.8</b>                   | <b>8,685.0</b>            | <b>-</b>                  |

Note: Details may not sum to totals due to rounding

## Appendix C: Toll Bridge Seismic Retrofit Program Summary Schedule



## Appendix D: Regional Measure 1 Program Cost Detail (\$Millions)

| Project  | EA Number             | June 2005 Budget | Approved Changes | Current Budget | Actual Cost To Date (11/2005) | Estimate at Completion | At-Completion Variance |
|--|-----------------------|------------------|------------------|----------------|-------------------------------|------------------------|------------------------|
| a  | b                     | c                | d                | e = c + d      | f                             | g                      | h = g - e              |
| <b>New Benicia-Martinez Bridge Project</b>           |                       |                  |                  |                |                               |                        |                        |
| <b>New Bridge</b>                                    | <b>00603_</b>         |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                               |                       | 84.9             | 7.3              | 92.2           | 68.5                          | 92.2                   | -                      |
| Capital Outlay Construction                          |                       |                  |                  | -              |                               |                        | -                      |
| BATA Funding   |                       | 661.9            | 112.0            | 773.9          | 555.8                         | 773.9                  | -                      |
| Non-BATA Funding                                     |                       | 10.1             | -                | 10.1           | 13.9                          | 10.1                   | -                      |
| Subtotal   |                       | 672.0            | 112.0            | 784.0          | 569.7                         | 784.0                  | -                      |
| <b>Total</b>   |                       | 756.9            | 119.3            | 876.2          | 638.2                         | 876.2                  | -                      |
| <b>I-680/I-780 Interchange Reconstruction</b>        |                       |                  |                  |                |                               |                        |                        |
|  | <b>00606_</b>         |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                               |                       |                  |                  |                |                               |                        |                        |
| BATA Funding   |                       | 24.9             | 2.0              | 26.9           | 25.4                          | 26.9                   | -                      |
| Non-BATA Funding                                     |                       | 1.4              | 5.1              | 6.5            | 5.4                           | 6.5                    | -                      |
| Subtotal   |                       | 26.3             | 7.1              | 33.4           | 30.8                          | 33.4                   | -                      |
| Capital Outlay Construction                          |                       |                  |                  |                |                               |                        |                        |
| BATA Funding   |                       | 54.7             | 16.1             | 70.8           | 54.8                          | 70.8                   | -                      |
| Non-BATA Funding                                     |                       | 21.6             | -                | 21.6           | 13.1                          | 21.6                   | -                      |
| Subtotal   |                       | 76.3             | 16.1             | 92.4           | 67.9                          | 92.4                   | -                      |
| <b>Total</b>   |                       | 102.6            | 23.2             | 125.8          | 98.7                          | 125.8                  | -                      |
| <b>I-680/Marina Vista Interchange Reconstruction</b> |                       |                  |                  |                |                               |                        |                        |
|  | <b>00605_</b>         |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                               |                       | 18.3             | 1.2              | 19.5           | 19.0                          | 19.5                   | -                      |
| Capital Outlay Construction                          |                       | 51.5             | 3.4              | 54.9           | 51.3                          | 54.9                   | -                      |
| <b>Total</b>   |                       | 69.8             | 4.6              | 74.4           | 70.3                          | 74.4                   | -                      |
| <b>New Toll Plaza and Administration Building</b>    |                       |                  |                  |                |                               |                        |                        |
|  | <b>00604_</b>         |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                               |                       | 11.9             | 2.4              | 14.3           | 13.5                          | 14.3                   | -                      |
| Capital Outlay Construction                          |                       | 24.3             | 2.0              | 26.3           | 17.6                          | 26.3                   | -                      |
| <b>Total</b>   |                       | 36.2             | 4.4              | 40.6           | 31.1                          | 40.6                   | -                      |
| <b>Other Contracts</b>                               |                       |                  |                  |                |                               |                        |                        |
|  | <b>See note below</b> |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                               |                       | 15.7             | 3.1              | 18.8           | 8.6                           | 18.8                   | -                      |
| Capital Outlay Construction                          |                       | 37.5             | 9.6              | 47.1           | 15.0                          | 47.1                   | -                      |
| Capital Outlay Right-of-Way                          |                       | 20.4             | (0.1)            | 20.3           | 12.0                          | 20.3                   | -                      |
| <b>Total</b>   |                       | 73.6             | 12.6             | 86.2           | 35.6                          | 86.2                   | -                      |
| <b>Subtotal BATA Capital Outlay Support</b>          |                       | 155.7            | 16.0             | 171.7          | 135.0                         | 171.7                  | -                      |
| <b>Subtotal BATA Capital Outlay Construction</b>     |                       | 829.9            | 143.1            | 973.0          | 694.5                         | 973.0                  | -                      |
| <b>Subtotal Capital Outlay Right-of-Way</b>          |                       | 20.4             | (0.1)            | 20.3           | 12.0                          | 20.3                   | -                      |
| <b>Subtotal Non-BATA Capital Outlay Support</b>      |                       | 1.4              | 5.1              | 6.5            | 5.4                           | 6.5                    | -                      |
| <b>Subtotal Non-BATA Capital Outlay Construction</b> |                       | 31.7             | -                | 31.7           | 27.0                          | 31.7                   | -                      |
| <b>Project Reserves</b>                              |                       | 20.8             | 39.0             | 59.8           | -                             | 59.8                   | -                      |
| <b>Total New Benicia-Martinez Bridge Project</b>     |                       | <b>1,059.9</b>   | <b>203.1</b>     | <b>1,263.0</b> | <b>873.9</b>                  | <b>1,263.0</b>         | <b>-</b>               |

## Notes:

Includes EA's 00601\_, 00608\_, 00609\_, 0060A\_, 0060C\_, 0060E\_, 0060F\_, 0060G\_, and 0060H\_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding

## Appendix D: Regional Measure 1 Program Cost Detail (\$Millions) (Cont.)

| Project   | EA Number             | June 2005 Budget | Approved Changes | Current Budget | Actual Cost To Date (11/2005) | Estimate at Completion | At-Completion Variance |
|---|-----------------------|------------------|------------------|----------------|-------------------------------|------------------------|------------------------|
| a   | b                     | c                | d                | e = c + d      | f                             | g                      | h = g - e              |
| <b>Carquinez Bridge Replacement Project</b>       |                       |                  |                  |                |                               |                        |                        |
| <b>New Bridge</b>                                 | <b>01301_</b>         |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                            |                       | 60.5             | -                | 60.5           | 59.9                          | 62.3                   | 1.8                    |
| Capital Outlay Construction                       |                       | 253.3            | -                | 253.3          | 253.0                         | 256.3                  | 3.0                    |
| <b>Total</b>                                      |                       | 313.8            | -                | 313.8          | 312.9                         | 318.6                  | 4.8                    |
| <b>Crockett Interchange Reconstruction</b>        | <b>01305_</b>         |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                            |                       | 32.0             | -                | 32.0           | 31.9                          | 32.0                   | -                      |
| Capital Outlay Construction                       |                       | 73.9             | -                | 73.9           | 71.8                          | 73.9                   | -                      |
| <b>Total</b>                                      |                       | 105.9            | -                | 105.9          | 103.7                         | 105.9                  | -                      |
| <b>Existing 1927 Bridge Demolition</b>            | <b>01309_</b>         |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                            |                       | 16.1             | -                | 16.1           | 7.8                           | 16.1                   | -                      |
| Capital Outlay Construction                       |                       | 35.2             | -                | 35.2           | 16.0                          | 35.2                   | -                      |
| <b>Total</b>                                      |                       | 51.3             | -                | 51.3           | 23.8                          | 51.3                   | -                      |
| <b>Other Contracts</b>                            | <b>See note below</b> |                  |                  |                |                               |                        |                        |
| Capital Outlay Support                            |                       | 15.8             | -                | 15.8           | 14.4                          | 15.0                   | (0.8)                  |
| Capital Outlay Construction                       |                       | 18.8             | -                | 18.8           | 15.3                          | 17.9                   | (0.9)                  |
| Capital Outlay Right-of-Way                       |                       | 10.5             | -                | 10.5           | 9.9                           | 10.5                   | -                      |
| <b>Total</b>                                      |                       | 45.1             | -                | 45.1           | 39.6                          | 43.4                   | (1.7)                  |
| <b>Subtotal BATA Capital Outlay Support</b>       |                       | 124.4            | -                | 124.4          | 114.0                         | 125.4                  | 1.0                    |
| <b>Subtotal BATA Capital Outlay Construction</b>  |                       | 381.2            | -                | 381.2          | 356.1                         | 383.3                  | 2.1                    |
| <b>Subtotal Capital Outlay Right-of-Way</b>       |                       | 10.5             | -                | 10.5           | 9.9                           | 10.5                   | -                      |
| <b>Project Reserves</b>                           |                       | 12.1             | -                | 12.1           | -                             | 9.0                    | (3.1)                  |
| <b>Total Carquinez Bridge Replacement Project</b> |                       | <b>528.2</b>     | <b>-</b>         | <b>528.2</b>   | <b>480.0</b>                  | <b>528.2</b>           | <b>-</b>               |

## Notes:

Other Contracts includes EA's 01302\_, 01303\_, 01304\_, 01306\_, 01307\_, 01308\_, 0130A\_, 0130C\_, 0130D\_, 0130F\_, 0130G\_, 0130H\_, 0130J\_, 00453\_, 00493\_, 04700\_, 00607\_, 2A270\_, and 29920\_ and all Project Right-of-Way

Note: Details may not sum to totals due to rounding



## Appendix D: Regional Measure 1 Program Cost Detail (\$Millions) (Cont.)

| Project  | EA Number                              | June 2005 Budget | Approved Changes | Current Budget | Actual Cost To Date (11/2005) | Estimate at Completion | At-Completion Variance |
|--|--|------------------|------------------|----------------|-------------------------------|------------------------|------------------------|
| a  | b                                      | c                | d                | e = c + d      | f                             | g                      | h = g - e              |
| <b>Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation</b> | <b>See note <sup>1</sup> below</b>     |                  |                  |                |                               |                        |                        |
| Capital Outlay Support   |  |                  |                  |                |                               |                        |                        |
| BATA Funding   |  | 2.2              | -                | 2.2            | 1.4                           | 2.2                    | -                      |
| Non-BATA Funding   |  | 8.6              | -                | 8.6            | 10.4                          | 10.4                   | 1.8                    |
| Subtotal   |  | 10.8             | -                | 10.8           | 11.8                          | 12.6                   | 1.8                    |
| Capital Outlay Construction  |  |                  |                  |                |                               |                        |                        |
| BATA Funding   |  | 40.2             | -                | 40.2           | 33.4                          | 33.3                   | (6.9)                  |
| Non-BATA Funding   |  | 51.1             | -                | 51.1           | 49.7                          | 51.1                   | -                      |
| Subtotal   |  | 91.3             | -                | 91.3           | 83.1                          | 84.4                   | (6.9)                  |
| Project Reserves   |  | -                | -                | -              | -                             | -                      | -                      |
| <b>Total</b>   |  | 102.1            | -                | 102.1          | 94.9                          | 97.0                   | (5.1)                  |
| <b>Richmond-San Rafael Bridge Deck Overlay Rehabilitation</b>                    | <b>0415U_</b>                          |                  |                  |                |                               |                        |                        |
| Capital Outlay Support   |  |                  |                  |                |                               |                        |                        |
| BATA Funding   |  | 4.0              | -                | 4.0            | 1.5                           | 4.0                    | -                      |
| Non-BATA Funding   |  | 4.0              | -                | 4.0            | -                             | 4.0                    | -                      |
| Subtotal   |  | 8.0              | -                | 8.0            | 1.5                           | 8.0                    | -                      |
| Capital Outlay Construction  |  | 16.9             | -                | 16.9           | -                             | 20.7                   | 3.8                    |
| Project Reserves   |  | 0.1              | -                | 0.1            | -                             | -                      | (0.1)                  |
| <b>Total</b>   |  | 25.0             | -                | 25.0           | 1.5                           | 28.7                   | 3.7                    |
| <b>Richmond Parkway Project (RM 1 Share Only)</b>                                | <b>Non-Caltrans</b>                    |                  |                  |                |                               |                        |                        |
| Capital Outlay Support   |  | -                | -                | -              | -                             | -                      | -                      |
| Capital Outlay Construction  |  | 5.9              | -                | 5.9            | 3.9                           | 5.9                    | -                      |
| <b>Total</b>   |  | 5.9              | -                | 5.9            | 3.9                           | 5.9                    | -                      |
| <b>San Mateo-Hayward Bridge Widening</b>   | <b>See note <sup>2</sup> below</b>     |                  |                  |                |                               |                        |                        |
| Capital Outlay Support   |  | 34.6             | -                | 34.6           | 34.0                          | 34.6                   | -                      |
| Capital Outlay Construction  |  | 180.2            | -                | 180.2          | 174.0                         | 176.2                  | (4.0)                  |
| Capital Outlay Right-of-Way  |  | 1.5              | -                | 1.5            | 0.5                           | 0.6                    | (0.9)                  |
| Project Reserves   |  | 1.5              | -                | 1.5            | -                             | 0.5                    | (1.0)                  |
| <b>Total</b>   |  | 217.8            | -                | 217.8          | 208.5                         | 211.9                  | (5.9)                  |
| <b>I-880/SR-92 Interchange Reconstruction</b>                                    | <b>EA's 23317_, 01601_, and 01602_</b> |                  |                  |                |                               |                        |                        |
| Capital Outlay Support   |  | 28.8             | -                | 28.8           | 25.8                          | 43.2                   | 14.4                   |
| Capital Outlay Construction  |  |                  |                  |                |                               |                        |                        |
| BATA Funding   |  | 85.2             | -                | 85.2           | -                             | 109.4                  | 24.2                   |
| Non-BATA Funding   |  | 9.6              | -                | 9.6            | -                             | 9.6                    | -                      |
| Subtotal   |  | 94.8             | -                | 94.8           | -                             | 119.0                  | 24.2                   |
| Capital Outlay Right-of-Way  |  | 9.9              | -                | 9.9            | 7.3                           | 13.0                   | 3.1                    |
| Project Reserves   |  | 0.3              | -                | 0.3            | -                             | 11.1                   | 10.8                   |
| <b>Total</b>   |  | 133.8            | -                | 133.8          | 33.1                          | 186.3                  | 52.5                   |
| <b>Bayfront Expressway Widening</b>  | <b>EA's 00487_, 01511_, and 01512_</b> |                  |                  |                |                               |                        |                        |
| Capital Outlay Support   |  | 8.6              | -                | 8.6            | 8.0                           | 8.2                    | (0.4)                  |
| Capital Outlay Construction  |  | 26.5             | -                | 26.5           | 24.8                          | 26.5                   | -                      |
| Project Reserves   |  | 0.2              | -                | 0.2            | 0.2                           | 0.2                    | -                      |
| <b>Total</b>   |  | 35.3             | -                | 35.3           | 33.0                          | 34.9                   | (0.4)                  |
| <b>US 101/University Avenue Interchange Modification</b>                         | <b>Non-Caltrans</b>                    |                  |                  |                |                               |                        |                        |
| Capital Outlay Support   |  | -                | -                | -              | -                             | -                      | -                      |
| Capital Outlay Construction  |  | 3.8              | -                | 3.8            | 3.7                           | 3.8                    | -                      |
| <b>Total</b>   |  | 3.8              | -                | 3.8            | 3.7                           | 3.8                    | -                      |
| <b>Subtotal BATA Capital Outlay Support</b>                                      |  | 358.3            | 16.0             | 374.3          | 319.7                         | 389.3                  | 15.0                   |
| <b>Subtotal BATA Capital Outlay Construction</b>                                 |  | 1,569.8          | 143.1            | 1,712.9        | 1,290.4                       | 1,732.1                | 19.2                   |
| <b>Subtotal Capital Outlay Right-of-Way</b>                                      |  | 42.3             | (0.1)            | 42.2           | 29.7                          | 44.4                   | 2.2                    |
| <b>Subtotal Non-BATA Capital Outlay Support</b>                                  |  | 14.0             | 5.1              | 19.1           | 15.8                          | 20.9                   | 1.8                    |
| <b>Subtotal Non-BATA Capital Outlay Construction</b>                             |  | 92.4             | -                | 92.4           | 76.7                          | 92.4                   | -                      |
| <b>Project Reserves</b>  |  | 35.0             | 39.0             | 74.0           | 0.2                           | 80.6                   | 6.6                    |
| <b>Total RM1 Program</b>   |  | 2,111.8          | 203.1            | 2,314.9        | 1,732.5                       | 2,359.7                | 44.8                   |

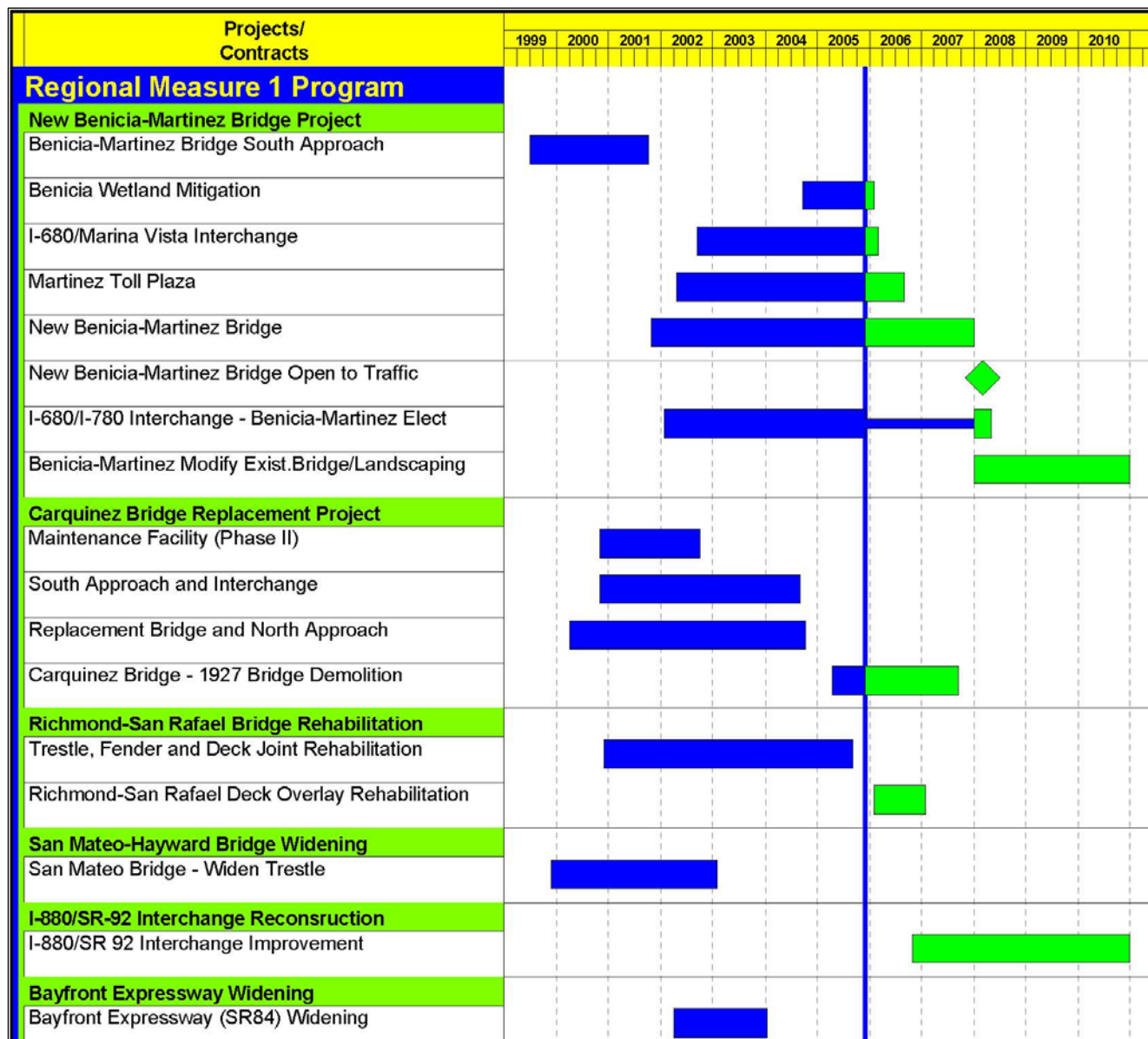
## Notes:

<sup>1</sup> Richmond-San Rafael Bridge Trestle, Fender, and Deck Joint Rehabilitation Includes Non-TBSRA Expenses for EA 0438U\_ and 04157\_

<sup>2</sup> San Mateo-Hayward Bridge Widening Includes EA's 00305\_, 04501\_, 04502\_, 04503\_, 04504\_, 04505\_, 04506\_, 04507\_, 04508\_, 04509\_, 27740\_, 27790\_, 04860\_

Note: Details may not sum to totals due to rounding

## Appendix E: Regional Measure 1 Program Summary Schedule



## Appendix F: Glossary of Terms

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**AB144/SB 66 BUDGET:** the planned allocation of resources for the Toll Bridge Seismic Retrofit Program, or subordinate projects or contracts, as provided in Assembly Bill 144 and Senate Bill 66, signed into law by Governor Schwarzenegger on July 18, 2005 and September 29, 2005, respectively.

**APPROVED CHANGES:** changes to the AB144/SB 66 Budget or June 2005 BATA Budget as approved by the Bay Area Toll Authority Commission.

**AT COMPLETION VARIANCE or VARIANCE (cost):** the mathematical difference between the Estimate at Completion and the Current Budget.

**COST TO DATE:** the actual expenditures incurred by the program, project, or contract as of the month and year shown.

**CURRENT BUDGET:** the sum of the AB144/SB66 Budget or June 2005 BATA Budget and Approved Changes.

**ESTIMATE AT COMPLETION:** the current forecast of all of the costs that are projected to be expended so as to complete the given scope of the program, project, or contract.

**JUNE 2005 BATA BUDGET:** the planned allocation of resources for the Regional Measure 1 Program, or subordinate projects or contracts as authorized by the Bay Area Toll Authority as of June 2005.

**PROJECT COMPLETE AB144/SB 66 BASELINE or BASELINE PROJECT (or CONTRACT) COMPLETION DATE:** the planned completion date for the Toll Bridge Seismic Retrofit Program or subordinate projects or contracts.

**PROJECT COMPLETE BASELINE:** the planned completion date for the Regional Measure 1 Program or subordinate projects or contracts.

**PROJECT COMPLETE FORECAST or FORECAST PROJECT (or CONTRACT) COMPLETION DATE:** the current projected date for the completion of the program, project, or contract.

**SCHEDULE VARIANCE or VARIANCE (schedule):** the mathematical difference expressed in months between the Forecast Completion Date and the Baseline Completion Date.

The following information is provided in accordance with California Government code Section 7550:

This document is one of a series of reports prepared for the Bay Area Toll Authority (BATA)/Metropolitan Transportation Commission (MTC) for the Toll Bridge Seismic Retrofit and Regional Measure 1 Programs. The contract value for the monitoring efforts, technical analysis, and field site works that contribute to these reports, as well as the report preparation and production, is \$1,574,873.

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